



August 7, 2023

L-2023-098
10 CFR 50.90
10 CFR 50.54(q)

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Re: Florida Power & Light Company
St. Lucie Units 1 and 2, Docket Nos. 50-335, 50-389
Turkey Point Units 3 and 4, Docket Nos. 50-250, 50-251

NextEra Energy Seabrook, LLC
Seabrook Station, Docket No. 50-443

NextEra Energy Point Beach, LLC
Point Beach Units 1 and 2, Docket Nos. 50-266, 50-301

Response to Request for Additional Information Regarding License Amendment Request for
Common Emergency Plan Consistent with NUREG-0654, Revision 2

References:

1. Florida Power & Light Company letter L-2022-160, "License Amendment Request for Common Emergency Plan Consistent with NUREG-0654, Revision 2," October 4, 2022 (ML22278A031)
2. NRC Letter, "Point Beach Nuclear Plant, Units 1 and 2; Seabrook Station, Unit 1; St. Lucie Plant, Unit Nos. 1 and 2; and Turkey Point Nuclear Generating Unit Nos. 3 and 4 – Supplemental Information Needed for Acceptance of Requested Licensing Action RE: Amendment Request for Common Emergency Plan (EPID L-2022-LLA-0146)," November 22, 2022 (ML22311A558)
3. Florida Power & Light Company letter L-2022-185, "Supplement to License Amendment Request for Common Emergency Plan Consistent with NUREG-0654, Revision 2," December 9, 2022 (ML22343A254)
4. NRC Letter, "Point Beach Nuclear Plant, Units 1 and 2; Seabrook Station, Unit 1; St. Lucie Plant, Unit Nos. 1 and 2; and Turkey Point Nuclear Generating Unit Nos. 3 and 4 – Acceptance of Requested Licensing Action RE: Amendment Request for Common Emergency Plan (EPID L-2022-LLA-0146)" (ML22339A001)
5. NRC Message from Justin Poole, Project Manager for NextEra Fleet, "Request for Additional Information RE: Fleet Emergency Plan Amendment Request," June 22, 2023 (ML23173A152)

In Reference 1, Florida Power & Light Company, acting on behalf of itself and as agent for NextEra Energy Seabrook, LLC and NextEra Energy Point Beach, LLC submitted a license amendment request to change the emergency plan for each site. Specifically, the proposed amendment would adopt a new fleet common emergency plan with site-specific annexes.

In Reference 2, the NRC staff requested supplemental information to enable the staff to make an independent assessment regarding the acceptability of the proposed amendment request.

Reference 3 provided supplemental information that enabled the NRC staff in Reference 4 to conclude the application provided technical information in sufficient detail to perform a detailed technical review and make an independent assessment regarding the acceptability of the proposed amendment in terms of regulatory requirements and the protection of public health and safety and the environment.

Reference 5 transmitted a request for additional information that the NRC staff has determined is necessary to complete its review.

The enclosure to this letter provides the requested information.

This letter does not alter the conclusions in Reference 1 that the proposed change does not involve a significant hazards consideration pursuant to 10 CFR 50.92, and there are no significant environmental impacts associated with the change.

This letter contains no new or revised regulatory commitments.

If you should have any questions regarding this submittal, please contact Mr. J. Michael Davis, Licensing Manager at (319) 851-7032.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on August 7, 2023

Sincerely,

A handwritten signature in black ink, appearing to read "D. Strand", is written over a horizontal line. To the right of the signature, the word "for" is handwritten.

Dianne Strand

General Manager Regulatory Affairs

Enclosure

cc: NRC Project Manager - Point Beach
NRC Project Manager - St. Lucie
NRC Project Manager - Turkey Point
NRC Project Manager - Seabrook
Regional Administrator - NRC Region 1
Regional Administrator - NRC Region 2
Regional Administrator - NRC Region 3
NRC Resident Inspector - Point Beach

NRC Resident Inspector - St. Lucie
NRC Resident Inspector - Turkey Point
NRC Resident Inspector - Seabrook
Wisconsin Emergency Management
Chief, Bureau of Radiation Control, Florida Department of Health
Director Homeland Security and Emergency Management (New Hampshire)

ENCLOSURE

Response to Request for Additional Information

REQUEST FOR ADDITIONAL INFORMATION RELATED TO
LICENSE AMENDMENT REQUEST TO REVISE THE EMERGENCY PLANS
FLORIDA POWER & LIGHT COMPANY
NEXTERA ENERGY POINT BEACH, LLC
NEXTERA ENERGY SEABROOK, LLC
POINT BEACH NUCLEAR PLANT
SEABROOK STATION UNIT 1
ST. LUCIE NUCLEAR PLANT
TURKEY POINT NUCLEAR GENERATING PLANT
DOCKET NOS. 50-250, 50-251, 50-266, 50-301, 50-335, 50-389, AND 50-443

By application dated October 4, 2022, as supplemented by letter dated December 9, 2022 (Agencywide Documents Access and Management System Accession (ADAMS) Nos. ML22278A031 and ML22343A254, respectively), Florida Power & Light Company, NextEra Energy Point Beach, LLC, and NextEra Energy Seabrook, LLC (collectively, NextEra or the licensee), submitted a license amendment request (LAR) for Point Beach Nuclear Plant, Units 1 and 2; Seabrook Station, Unit No. 1; St. Lucie Plant, Unit Nos. 1 and 2; and Turkey Point Nuclear Generating Unit Nos. 3 and 4, to the U.S. Nuclear Regulatory Commission (NRC) for review and prior approval pursuant to Section 50.54(q) of Title 10 of the *Code of Federal Regulations* (10 CFR). Specifically, the proposed license amendment request would create a new fleet common emergency plan with site-specific annexes developed utilizing NUREG-0654/FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support Nuclear Power Plants," Revision 2 dated December 2019 (ML19347D139), (NUREG-0654). The proposed fleet common emergency plan is referred to as the "NextEra Common Emergency Plan."

The following requests for additional information (RAI) is needed for the NRC staff to complete its review.

The following requirements apply to RAIs 1 through 44:

- 10 CFR 50.47(b)(2) requires on-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available and the interfaces among various onsite response activities and offsite support and response activities are specified.

Associated guidance in NUREG-0654, Section II.B, Evaluation Criterion B.1 states that the emergency plan specifies how the requirements of 10 CFR 50.47(b)(2) and the applicable sections of Appendix E to 10 CFR Part 50 are met.

NOTE: Because the LAR discussed Point Beach first, the following RAIs specific to staffing reference Point Beach. Although the remaining facilities have similar discussions, there are only slight changes for each site-specific discussion. Unless specifically identified as an RAI applicable to a single facility, The below RAIs apply to all NextEra facilities.

Command and Control Function

RAI 1. All NextEra Sites

Section 3.3.1, "Site Emergency Director at 90 minutes," of the LAR enclosure, "Evaluation of Proposed Changes," states:

Per the guidance in NUREG-0654, Table B-1, "Emergency Response Organization (ERO) Staffing and Augmentation Plan," an augmented "Senior Manager" should fulfill the "Emergency Operations Facility Director" major task at 60 minutes.

However, Section 2.2.1, "[Potential RIE 2-1] Site Emergency Director at 90 Minutes," of the LAR supplement states,

The proposed emergency plan adds 30 minutes to the augmentation response time for the Site Emergency Director minimum staff ERO position that performs the Command-and-Control function.

The justification for the additional 30 minutes response time provided in Section 2.2.1 states,

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

Issue: The NextEra LAR does not provide an individual to relieve the Shift Manager of either the Shift Manager function or the Emergency Direction function within 60 minutes of an alert or higher declaration nor does it provide sufficient justification to support the deviation from NUREG-0654 guidance.

Request: Concerning Command and Control:

- a. Provide a basis for adjusting the response time from 60 to 90 minutes. In your response, discuss unique NextEra design characteristics to support this reduction in effectiveness that are beyond the capabilities of typical operating reactors as these capabilities are subsumed in Table B-1 of NUREG-0654.
- b. If the NextEra do not have unique design characteristics that support adjusting the response time from 60 to 90 minutes, provide clarification for who will relieve the Shift Manager of either the Shift Manager or Emergency Director functions within 60 minutes of an alert or higher emergency declaration.

RESPONSE

NextEra has determined that resolution of this item is most efficiently accomplished through transitioning it to an audit process.

RAI 2. All NextEra Sites

Section 3.3.1, "Site Emergency Director at 90 minutes," of each site-specific LAR enclosure, "Evaluation of Proposed Changes," states:

The demonstration and evaluation of the Shift Manager to perform their emergency plan functions is continuously evaluated during emergency planning drills/exercises and operations training simulator sessions.

This section further states,

Licensed Operator Continuing (LOR) training periodically has scenarios that extend to 90 minutes without augmented ERO involvement.

Issue: The proposed NextEra Common Emergency Plan includes 20 emergency plan responsibilities for the shift manager. No evidence was provided that the shift manager responsibilities are demonstrated and/or evaluated for 60 minutes after an alert or greater declaration.

Request: Provide objective evidence that LOR simulator training scenarios evaluated the performance of all shift manager ERO tasks as identified in the proposed NextEra Common Emergency Plan. This evidence should demonstrate successful performance of these tasks for 90 minutes or more following an alert or higher declaration.

RESPONSE

NextEra has determined that resolution of this item is most efficiently accomplished through transitioning it to an audit process.

RAI 3. Turkey Point Only

Requirement:

- 10 CFR 50.54(m)(2)(i) requires each licensee shall meet the minimum licensed operator staffing requirements in the following table....

The Turkey Point Radiological Emergency Plan (REP) Table 2-2a, "Shift and Emergency Staffing Capabilities," includes a note stating that minimum crew composition is identified in technical specifications [for Turkey Point].

Issue: The minimum crew composition identified in technical specifications for Turkey Point is not consistent with either the Turkey Point REP or the requirements of 10 CFR 50.54(m)(2)(i). Table 6.2-1, "Minimum Shift Crew Composition," of the Turkey Point technical specifications indicates that one senior reactor operator [SRO] is required with both units in MODE 1, 2, 3, or 4 while Table 2-2a of the Turkey Point REP requires three SROs, one of whom is the shift manager.

It is not clear that an SRO would be available to provide oversight for each nuclear power unit in

addition to the shift manager.

Request: For the proposed NextEra Common Emergency Plan, clarify how Turkey Point will ensure that an SRO will be available for each operating unit with an additional SRO available to perform the command-and-control function. [this RAI is specific to Turkey Point]

RESPONSE

Turkey Point Technical Specification Table 6.2-1, Minimum Shift Crew Composition requires one SM with one or more units in MODE 1, 2, 3, or 4. This table also requires one SRO with one or more units in MODE 1, 2, 3, or 4. The table defines SM as a "Shift Manager with a Senior Operator license" and SRO as an "individual with a Senior Operator license." As Turkey Point is a two-unit site with a common control room, this meets the requirement of two Senior Operators found in 10 CFR 50.54(m)(2)(i).

The current Radiological Emergency Plan (REP), and thus staffing practice, as well as the Common Emergency Plan (CEP), exceed these minimum requirements. The REP requires three Senior Reactor Operators (SM, Unit Supervisor). The Turkey Point On-Shift Staffing Analysis requires a Shift Manager and two Unit Supervisors (US). In both cases, at least three Senior Operator licensed individuals are assigned to each shift. During an emergency, the division of responsibilities will be:

- Shift Manager: assume the command-and-control function.
- Affected US: maintain operational supervision of the affected unit.
- Unaffected US: maintain operational supervision of the unaffected unit.

Communications Function

RAI 4. All NextEra Sites

Section 2.2.3, "[Potential RIE 2-3] ORO Communicator at 90 Minutes," of the LAR supplement states:

If the offsite agency needs additional information, as discussed above, the control room can provide the information that is needed with minimum burden to the on-shift staff.

The justification for the additional 30 minutes response time provided in Section 3.3.3, "ORO [offsite response organization] Communicator at 90 minutes," of the LAR states:

The augmentation (relief) of this position should occur within 60-minutes of an Alert ECL, or greater, and is intended to relieve the on-shift staff of this EP function. This function should consist of 2 staff members to fulfill the communication needs, at a minimum: 1 for the NRC and 1 for ORO notification and status updates. Additional communicators may be called upon as needed, and at the discretion of the licensee.

This section further states,

To adequately support the elimination or extension of the two 60-minute responders, the licensee should show that two on-shift positions are identified to fill the 60-minute responder's role to "Notify licensee, State, local and Federal personnel [and] maintain communication." The licensee should show that these positions are not assigned other tasks that may prevent the timely performance of their assigned notification or communication functions, as specified in the emergency plan.

Section 3.3.1.1, "Emergency Plan Change Assessment," of the LAR states:

The proposed emergency plan assigns a Shift Communicator (typically the Shift Manager) to fill the Communications function, as a collateral duty.

Issue: The proposed NextEra Common Emergency Plan would rely on one on-shift communicator who could be assigned other tasks to perform the ORO and emergency notification system (ENS) communications.

Request: Concerning ORO and ENS communication, provide the following:

- a. Explain who will relieve the on-shift communicator of the ORO communication function within 60 minutes of an alert or higher declaration and provide a discussion of how it meets NUREG-0654 guidance for the ORO communicator to not support the performance of collateral duties.
- b. Explain who will be available to respond to ORO questions related to notification messages.

RESPONSE

NextEra has determined that resolution of this item is most efficiently accomplished through transitioning it to an audit process.

RAI 5. All NextEra Sites

Section 2.2.4, "[Potential RIE 2-4] ENS Communicator at 90 Minutes," of the LAR supplement states:

The shift communicator is able to communicate immediately, not to exceed 1 hour, with the NRC HOO to provide real time information and an open line if desired.

Section 3.3.4, "ENS Communicator at 90 minutes," of the LAR states:

The augmentation (relief) of this position should occur within 60-minutes of an Alert ECL, or greater, and is intended to relieve the on-shift staff of this EP function. This function should consist of 2 staff members to fulfill the communication needs, at a minimum: 1 for the NRC and 1 for ORO notification

and status updates. Additional communicators may be called upon as needed, and at the discretion of the licensee.

This section further states,

To adequately support the elimination or extension of the two 60-minute responders, the licensee should show that two on-shift positions are identified to fill the 60-minute responder's role to "Notify licensee, State, local and Federal personnel [and] maintain communication." The licensee should show that these positions are not assigned other tasks that may prevent the timely performance of their assigned notification or communication functions, as specified in the emergency plan.

Issue: Section 3.3.1 Paragraph 1, "Emergency Plan Change Assessment," of the LAR supplement states:

The proposed emergency plan assigns a Shift Communicator (typically the Shift Manager) to fill the Communications function, as a collateral duty.

The proposed NextEra Common Emergency Plan would rely on one on-shift communicator who could be assigned other tasks to perform the ORO and ENS communications.

Licensees are required by 10 CFR 50.72(c)(3) to maintain continuous communications with the NRC when requested. Licensees have a responsibility to provide enough on-shift personnel knowledgeable about plant operations and emergency plan implementation to enable timely, accurate, and reliable reporting of events without interfering with plant operation. The effectiveness of the NRC during an event depends in large measure on complete and accurate reports from licensees.

Request: Explain who will relieve the on-shift communicator of the ENS communication function within 60 minutes of an alert or higher declaration and how it meets NUREG-0654 guidance for the NRC communicator to not support the performance of collateral duties.

RESPONSE

NextEra has determined that resolution of this item is most efficiently accomplished through transitioning it to an audit process.

RAI 6. All NextEra Sites

Point Beach Analysis #4 line 208 of the LAR supplement states the shift communicator position can be assigned as a collateral duty to an on-shift position other than the radiation protection technician (RPT) or radiation protection qualified individual (RPQI). This position includes NRC notification and communications (which could require maintaining an open line of communication), ERO notification, and State and local event notification. Note: this RAI reflects the on-shift capability to perform the communications function and not the timing of augmentation.

Issue: The application does not identify the ORO or the ENS [NRC] communicators on-shift to perform the communication functions. The NRC staff could not determine if there was sufficient on-shift capability to perform the ORO and NRC communication functions. Note: this request focuses on on-shift capability.

Request: Concerning ORO and ENS communication:

- a. Provide clarification that describes who is expected to perform the on-shift ORO and ENS communication functions for alert or greater declarations. Note: this clarification should not rely on concurrent performance by individuals required to perform other functions such as fire brigade, plant operations during off-normal conditions, and ERO functions such as command-and-control.
- b. Explain how NextEra determined that performance of the ORO and ENS communication function could be performed as a collateral duty for the shift manager, on-shift SROs responsible for the direction of licensed operators, or auxiliary operators required to support plant operations as described in NextEra technical specifications or the fire brigade. Note: if NextEra has an individual capable of performing ORO and ENS communication that is not required to concurrently perform actions in response to the event, describe that individual and explain where that capability is reflected in the proposed NextEra Common Emergency Plan.

RESPONSE

- a. In accordance with Table B1 from NUREG-0654 R 2, the on-shift communicator is a single person that can perform their function as a collateral duty.

Each NextEra Energy site has assigned the Communicator function to a different on-shift staff position. Since the guidance in NUREG-0654 indicates this position may have collateral duties and is not indicated as communicating exclusively with either OROs or NRC, this person may also perform initial dose assessment by initiating dose assessment software. The Communicator position will not be assigned any functions that cannot be performed as a collateral duty.

NextEra Energy employs a system that performs initial ORO and NRC notifications using electronic means. This system is operated by the Emergency Classification Advisor (ECA) and notifications are approved by the Shift Manager in the control room and TSC. The electronic system takes inputs from the ECA, creates the site notification form, sends that notification form to ERO and offsite agency leadership, activates the ERO, and calls each warning point using an electronic voice. There is no need for the communicator at this point. In the event of a network outage or other connectivity issues, the company behind the electronic system operates an "Emergency Live Operator" service who can activate the system on behalf of the site in the emergency.

- b. NextEra Energy does not at any of its sites assign the Communicator function for any of the positions questioned by NRC. The site specific On-shift Staffing Analysis (OSA) per the NRC endorsed accepted method document (NEI 10-05). The OSA demonstrated can accomplish timely performance of their assigned functions as specified in the emergency plan. The analyses ran the sequence of tasks out to 120 minutes and included the STA

functions/tasks. The results of the analyses are:

- 1) The task analyses did not identify non validated tasks that were performed by the on-shift positions.
- 2) The task analyses did identify potential task overlaps in the events that were analyzed.
- 3) The task timing study resolved the potential task overlaps in the events that were analyzed. Emergency response tasks were performed sequential with other tasks such that no overlap or overburden occurred.

RAI 7. All NextEra Sites

Point Beach Analysis #4 line 343 of the LAR supplement states:

When an emergency occurs, ERO personnel will ensure ERDS [emergency response data system] operation as soon as possible but not later than one hour after an alert or higher emergency classification is declared in accordance with 10 CFR 50.72(a)(4).

Issue: Because no ERO augmentation would occur for 90 minutes, it is not clear to the NRC staff who would be available to perform this function.

Request: Clarify who will ensure ERDS operation within one hour of an alert or higher emergency classification. Note: because the proposed NextEra LAR would not provide ERO augmentation for 90 minutes, this function would rely on the on-shift staff. The clarification should include an evaluation regarding the availability and capability of the designated individual to perform this function. The NextEra Common Emergency Plan or Implementing Procedures should be updated to reflect these assignments.

RESPONSE

Currently, Point Beach and Seabrook maintain ERDS online providing data full time to the NRC. The intent is that all sites will change to providing ERDS data full time to implement the new emergency plan. Control Room procedures contain a verification to ensure that the system is enabled. This verification is a simple check for operation and the time required is minimal (less than a minute). If the system is in an abnormal state (offline), it takes less than 5 minutes for a shift operator to restart the data connection.

Radiation Protection Function

RAI 8. All NextEra Sites

Section 3.2.4, "On-shift RP Personnel Allowed Collateral Duties," of the LAR states:

The ability to provide radiological expertise when the plant is experiencing an

event with serious radiological consequences is crucial, due to the unknown radiological environment faced by emergency workers, particularly at the onset of the event. This function should be staffed by 2 qualified RP staff members on-shift (or 1 per unit for multi-unit sites). These staff members should not have any collateral duties during emergency response.

This section further states,
Consistent with NUREG-0654 R2, the proposed emergency plan assigns the Dose Assessments /Projections [function] as a collateral duty. This emergency response collateral duty can be assigned to any on-shift individual qualified in Dose Assessment.

NUREG-0654, Table B-1, "Emergency Response Organization (ERO) Staffing and Augmentation Plan," note 1 states:

Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time. A 10 CFR Part 50, Appendix E on-shift staffing analysis must be performed to support assignment of multiple roles to individual responders on-shift. For augmented ERO positions, a performance-based approach is acceptable for evaluating whether augmented personnel can adequately perform collateral functions without having competing priorities.

Issue: The NextEra LAR does not include an evaluation based on analysis or evaluation that demonstrates how an RP technician can concurrently perform dose assessment and RP functions. Additionally, as stated in the NextEra LAR, RP staff should not have any collateral duties during emergency response.

Request: Provide objective evidence of how an on-shift RP technician can concurrently perform dose assessment and RP functions.

RESPONSE

NextEra has determined that resolution of this item is most efficiently accomplished through transitioning it to an audit process.

RAI 9. All NextEra Sites

Section 3.2.4, "On-shift RP Personnel Allowed Collateral Duties," of the LAR states:

Personnel who are not ANSI qualified RPTs, such as an appropriately trained and qualified operator or a chemistry technician, may be assigned to the dedicated on-shift RPQI [radiation protection qualified individual] position. When the RPQI position is not filled by a qualified ANSI RPT, they cannot be given time sensitive or other tasks during emergency response that interfere with the Radiation Protection function.

Table B-1, "On-Shift and Augmenting ERO Staffing Plan," of the proposed NextEra Common Emergency Plan provides one RP technician and one RP qualified individual with augmentation by three RP technicians and two RP qualified individuals responding within 90 minutes of an alert or greater classification.

Issue: Based on the above, the NextEra LAR, as supplemented, would provide one qualified RP technician for 90 minutes after an alert or greater classification.

Request: Explain what NextEra design features or capabilities, that are unique to NextEra facilities, that justify reliance on a single qualified radiation protection technician to perform all required RP functions for 90 minutes after the declaration of a radiological event or provide sufficient justification for the proposed deviation from the guidance of NUREG-0654.

RESPONSE

NextEra has determined that resolution of this item is most efficiently accomplished through transitioning it to an audit process.

RAI 10. All NextEra Sites

Section 3.2.5, "Fewer OSC Response Personnel," of the LAR states:

NextEra controls the qualification of the ERO as outlined in 10 CFR 50.47(b)(15). To ensure that qualifications are consistent throughout the fleet, the RPQI qualification requirements are maintained in Section O of the proposed emergency plan. The RPQI ERO personnel will be task qualified to the tasks listed in NUREG-0654 Revision 2 Table B-[1] (shown above).

This section further states,

This approach meets the intent of 50.47(b)(15) and allows the Systematic Approach to Training (SAT) process to determine and control the RPQI qualification requirements by task. The proposed emergency plan will utilize the SAT process to set the qualification requirements of the RPQI, independent of an ANSI 8.1 standard, while ensuring that all personnel are trained to be able to respond to an emergency – not to be a day-to-day RPT.

Issue: The proposed ERO qualifications for RPQI ERO personnel in the NextEra Common Emergency Plan does not meet the systematic approach to training for radiation protection technicians pursuant to 10 CFR 50.120, "Training and qualification of nuclear power plant personnel." The LAR references tasks that are not part of a program that is subject to the SAT requirements of 10 CFR 50.120. The LAR also refers to NUREG-0654, Revision 2, Table B-1 tasks that would be performed by radiation protection technicians qualified under 50.120 and not by task qualified individuals.

Request: Provide a discussion of how RPQIs will be qualified as RP Technicians in addition to training on the tasks listed on NUREG-0654, Table B-1.

RESPONSE

NextEra has determined that resolution of this item is most efficiently accomplished through transitioning it to an audit process.

RAI 11. All NextEra Sites

Section 3.2.5, "Fewer OSC Response Personnel," of the LAR states:

Even with a SG [steam generator] tube rupture using the main condenser as the cooldown medium, the turbine buildings will not be unmanageable with the responders as the major steps of each site's emergency operating procedures for a SG tube rupture will have completed their major functions of "identify – isolate – cooldown – depressurize – terminate safety injection" are expected to be complete prior to ERO arrival. All temperature control steps later in the procedures where the ERO may be present will be minimal temperature control steps which send minimal additional contaminated steam into the secondary systems. As the limiting accident that will expand radioactively controlled/contaminated areas outside of the radiologically controlled area, there is no need to staff PWR [pressurized water reactor] sites at the same level outlined in the NUREG, which factored in BWR [boiling water reactor] designs into their calculations for staffing levels.

The NextEra LAR states in the above justification, these steps, "are expected to be complete prior to ERO arrival."

Request: Provide clarification that addresses the following:

- a. Provide an evaluation that supports the statement in the application that the key SG tube rupture responses of "identify – isolate – cooldown – depressurize – terminate safety injection" will be successfully completed for all conditions that may involve a SG tube rupture prior to ERO arrival.
- b. Provide an evaluation of PWR and/or BWR design calculations that supports the NextEra assertion that PWR designs have a different ERO augmentation response basis to support NextEra ERO staffing.

RESPONSE

- a. The discussion regarding the main sequences for SG cooldown are for illustrative purposes only and not intended for bounding analysis. The general description is based on simulator scenarios, which routinely are accomplished in the stated time frame.
- b. The discussion on the difference between BWRs v. PWRs annual dose data reported in NUREG-0713, Volume 42, Occupation Radiation Exposure at Commercial Nuclear Power Reactors and Other Facilities 2020 (ML22276A269) was to identify the difference between the reactor types and the improvements between years (refer to NUREG-0713 figures below). There is no calculation to associate the

differences to ERO staffing, but the information should be taken into consideration when evaluating ERO staffing levels (especially radiological protection personnel). in NUREG-0713 states that the average collective dose for individuals per BWR have been higher than those for PWRs for all years depicted. BWRs generally have higher collective doses because the steam produced in the reactor is used to drive turbines to produce electricity, which results in radioactivity being present in both the reactor and turbine systems. PWR systems are designed to keep the radioactivity within the reactor vessel and primary system and not in the turbine systems. The two loop/Steam Generator interface PWR design (verses single loop BWR) provides better initial containment during operating and emergency conditions. The proportionally lower PWR operating doses are representative of post-accident conditions.

A reasonable read of NUREG-0713 leads one to the conclusion that with less potential radiological exposure and radioactive controlled areas compared to a BWR, the PWR design allows for less ANSI qualified RP technicians needed for emergency response.

RAI 12. All NextEra Sites

Section 3.3.6, "Radiation Protection Personnel at 90 Minutes," of the LAR states:

While not all Alert ECLs (or lower) have radiological consequences, licensees should develop their ERO staffing plans for a worst-case scenario from a radiological risk perspective, i.e., an event which results in the immediate (within 60-minutes) loss of 2 or more fission product barriers leading to significant and unknown radiological conditions. The augmentation (support) of this position should occur in two stages: within 60 minutes of an Alert ECL or greater, 3 additional qualified RP staff should be available, and within 90 minutes of an Alert ECL, or greater, an additional 3 additional qualified RP staff should be available, and both are typically staffed in the OSC.

This section further states:

Radiation protection personnel perform multiple roles during normal and emergency plant operations. These roles include access control, personnel monitoring, and dosimetry, in addition to HP coverage for repair and corrective actions, search and rescue, first aid, and firefighting during emergency response operations. Per the guidance in Table B-1 of NUREG-0654, there should be two augmented responders at 60 minutes for the major task of "Radiation Protection." To adequately support an extension in response timing of the radiation protection 60-minute responders to 90 minutes, the licensee should show that the on-shift HP staffing includes as a minimum, four HP technicians in total for the site. The extra HP technicians are needed for in-plant protective actions for the other personnel added to the on-shift staffing to compensate for the extension in augmentation time, and to assess any offsite releases of radioactive materials.

Issue: The NextEra LAR, does not provide sufficient information for the NRC staff to conclude that one qualified RP technician could perform the RP tasks described by in the LAR for 90

minutes following an alert or higher declaration.

Request: For the RP technician, provide the following:

- a. Explain how one RP technician can perform access control, personnel monitoring, and dosimetry, RP coverage for repair and corrective actions, search and rescue, first aid, and firefighting during emergency response operations for 90 minutes after an alert or higher declaration.
- b. Explain how one RP technician performing the RP functions would also be available to assess the protected area for radiation and contamination levels.

RESPONSE

NextEra has determined that resolution of this item is most efficiently accomplished through transitioning it to an audit process.

RAI 13. All NextEra Sites

Section 3.3.6, "Radiation Protections Personnel at 90 Minutes," of the LAR states:

Due to the availability of FLEX equipment, NextEra stations have diverse protection against loss of ECCS capability and other systems, which provides a basis for determination that no immediate ECCS repair and corrective actions are likely necessary for on-shift personnel prior to augmentation of maintenance personnel.

This section further states:

By accounting for FLEX equipment and strategies that eliminate or prolong the onset of core damage and any radiological release of activity the RP challenges are simplified and the need for a 60-minute radiation protection personnel response is diminished.

Issue: The FLEX strategy, as codified by 10 CFR 50.155, provides mitigation strategies for beyond design basis external events and for mitigation strategies for a loss of large areas of the plant impacted by the event, due to explosions or fire. The NextEra LAR does not provide sufficient information that FLEX equipment provides a basis supporting the NextEra determination that "no immediate ECCS repair and corrective actions are likely necessary for on-shift personnel prior to augmentation of maintenance personnel" for a broad spectrum of events.

Request: Provide the following clarifications regarding the NextEra FLEX strategy:

- a. Would FLEX strategies be applicable to a spectrum of events in addition to beyond design basis external events and large area of the plant loss due to explosions or fire?
- b. How do the FLEX strategies justify reducing the number and extending the response times of ERO augmenting RP technicians in response to radiological events?
- c. Provide objective evidence that FLEX strategies are sufficiently effective and reliable to

justify extending the response times of ERO augmenting radiation protection technicians.

RESPONSE

- a. Per NEI 12-06, Diverse and Flexible Coping Strategies (FLEX) Implementation Guide, Revision 4, dated December 2016 (endorsed by the NRC in Regulatory Guide 1.226, Flexible Mitigation Strategies for Beyond-Design-Bases Events, Revision 0, Dated June 2019), the objective of FLEX is to establish an indefinite coping capability to prevent damage to the fuel in the reactor and spent fuel pools and to maintain the containment function by using plant equipment and FLEX equipment. The FLEX strategies are focused on maintaining or restoring key plant safety functions and are not tied to any specific damage state or mechanistic assessment of external events. A safety function-based approach is in keeping with the symptom-based approach taken to plant emergency operating procedures (EOPs) and facilitates the utilization of the FLEX strategies in support of the operating and emergency response network of procedures and guidance. Flex strategies will be used to supplement (not replace) the previously existing procedure structure that establishes command and control of events (e.g., AOP, EOP, SAMG, etc.). Additionally, B.5.b procedures, as discussed in Section B.5.b of the Interim Compensatory Measures (ICM) Order, EA-02-026, dated February 25, 2002, supplement these various command and control procedures.
- b. FLEX actions (like ANSI/ANS-58.8 and NUREG-0737 requirements) have been designed to avoid the need for heroic actions. Site specific analyses were evaluated for safety and environmental impacts that would impact a transit route, or analysis for specific external events that result in contingency strategies. This reduces the need for Radiation Protection Technician (RPT) support while taking actions.

Additionally, NEI 12-06 requires the ability to perform the Flex strategies and maintain the safety functions without ERO able to respond for 6 hours. The 6 hours is validated/evaluated per guidance in NEI 12-01.

- c. Per Regulatory Guide 1.226 Section 3.4:
Section 11.5.4 of NEI 12-06, Revision 4, discusses the programmatic controls for equipment and connections between that equipment and permanently installed SSCs. These controls include limited time periods in which the equipment and connection points may be non-functional for any reason, with the duration of the acceptable time period being based on the ability of the licensee to accomplish the intended function of the equipment by other means.

NextEra Energy currently has procedures in place requiring routine and preventive maintenance and testing for all FLEX equipment as well as programs that track, monitor and trend Corrective Action Requests associated with the FLEX program. Additionally, NextEra Energy has recently conducted a fleetwide unannounced FLEX proficiency exercise to demonstrate our ability to deploy and use FLEX equipment.

Regulatory Guide 1.226 addressed Flex equipment reliability: Section 11.5.4 of NEI 12-06, Revision 4, provides an acceptable method for controlling durations for which the equipment is nonfunctional or not in its specified reasonable protection configuration to satisfy those elements of reasonable protection. The NRC Staff position is that Section 11.5.4 of NEI 12-06, Revision 4, provides an acceptable method for controlling durations for which the equipment is nonfunctional or not in its specified reasonable protection configuration to satisfy those elements of reasonable protection. These durations were further verified by each of the plants as part of the FLEX Validation Reports that were provided to the NRC per EA 12-049.

Therefore, based upon the capability, design and reliability of the Flex equipment and program there is no need for OSC personnel (including RP technicians) are not required to respond at 60 minutes and the 30 additional minutes is inconsequential (considering the 6-hour capability).

RAI 14. All NextEra Sites

Section 3.3.6, "Radiation Protections Personnel at 90 Minutes," of the LAR states:

The NEI 12-01 based staffing analysis performed for using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Radiation Protection function out to 6 hours for design basis and other ER related events.

NEI 12-01, "Guidelines for Assessing Beyond Design Basis Accident Response Staffing and Communications Capabilities," describes the assessments that will determine the required staff necessary for responding to external events. Additionally, NEI 12-01 assumes that a hostile action does not occur during the period that the site is responding to the event. Because NEI 12-01 is limited to external events and assumes that a hostile action, NEI 12-01 is insufficient to justify extending or eliminating ERO augmentation positions. Additionally,

10 CFR 50.155 withdrew the orders and removed license conditions that were, in part, the basis for NEI 12-01.

Request: Provide a regulatory or technical basis for using NEI 12-01 to extend or eliminate ERO augmentation positions. Include in your discussion how the basis specifically addresses how a 6-hour augmentation is consistent with the 10 CFR 40.47(b)(2) requirement for timely augmentation.

RESPONSE

NextEra has determined that resolution of this item is most efficiently accomplished through transitioning it to an audit process.

RAI 15. All NextEra Sites

Section 3.3.6, "Radiation Protections Personnel at 90 Minutes," of the LAR states:

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Radiation Protection function out to 120 minutes for design basis and other ER related events.

Issue: The scope of tasks evaluated pursuant to NEI 10-05 is limited to the immediate actions performed by the on-shift staff. NEI 10-05 does not evaluate any tasks specifically performed by the augmenting ERO. Because NEI 10-05 does not include the tasks performed by the augmenting ERO, NEI 10-05 does not provide a justification for extending or eliminated ERO augmentation positions.

Request: Provide a regulatory or technical basis for using NEI 10-05 to extend or eliminate ERO augmentation positions. Include in your discussion how this basis specifically address how a 2-hour augmentation is consistent with the 10 CFR 40.47(b)(2) requirement for timely augmentation.

RESPONSE

NextEra has determined that resolution of this item is most efficiently accomplished through transitioning it to an audit process.

RAI 16. All NextEra Sites

Point Beach Analysis #4 line 211 of the LAR supplement states that Common Emergency Plan Table B.1.a establishes the requirements for activation of the ERO and an alert level. Line 212 of the analysis for Common Emergency Plan Table B.1.a further indicates that the site emergency director is responsible for all site internal and external response. Although this is consistent with the guidance of NUREG-0654 for providing an emergency coordinator in the TSC at an alert or higher declaration, it is not consistent with the NUREG-0654 guidance providing for an additional emergency director in EOF at a site area emergency (SAE) or higher declaration.

Issue: The LAR does not provide sufficient information supporting assigning all ERO responsibilities to a single individual for conditions that may warrant a SAE or higher of a declaration even when a classification advisor is available.

Request: For SAE or higher declarations, provide objective evidence supporting the performance of all site emergency director functions are able to be performed without delay or conflict.

RESPONSE

The Common Emergency Plan establishes a standardized staffing/activation schedule for all the Emergency Response Facilities at the declaration of an Alert or higher. Consequently, both the Site Emergency Director (TSC) and the EOF Manager positions will be filled within 90 minutes of that declaration. The standardized response based on a single

Emergency Classification Level (ECL) prevents duplication of effort between multiple facilities and assures the capability of the ERO to respond to an emergency with better functionality.

The Site Emergency Director is responsible for all on site actions of the ERO. The Site Emergency Director maintains the non-delegable responsibilities of Classification and Protective Action Recommendations throughout the event in progress. The EOF Manager is responsible for offsite coordination in support of the Site Emergency Director. The EOF Manager in this design is a principal assistant to the TSC ED. The EOF Manager will not be trained to perform classification and PAR; the EOF Manager provides the coordination of offsite response, removing that burden from the TSC ED. In this way, the EOF Manager performs a support function for the TSC ED to allow the ED to focus onsite response. Since the EOF Manager would be staffed at the same time as the TSC ED, this organization satisfies the intent of bringing in additional support personnel at Site Area Emergency (SAE); instead of waiting for escalation to SAE, NextEra would already have the necessary resources in place to provide those support functions. The EOF Manager fulfills the position described in NUREG-0654, Revision 2 Table B1, "SAE+60 Emergency Director" responder. Delegable responsibilities that fit with the onsite / offsite vision presented above will be taken over by the EOF Manager.

This model has been in place at Point Beach since October 2019 and has proven successful during numerous drills and exercises. Point Beach has a TSC Emergency Coordinator (NUREG-0654 R2 title) who is performing the function of the Common Emergency Plan's Site Emergency Director. This position maintains classification and protective action recommendation determination functions. Notification is also performed out of the TSC by the Emergency Classification Advisor using the Emergency Response Notifications for Incidents and Events (ERNIE) automated notification system. Using the standard NRC metrics of Drill and Exercise Performance Indicator, Point Beach has not had a missed classification, notification, Protective Action Recommendation (PAR) or PAR notification since this process was implemented. The TSC was designated in NUREG-0654 Table B1 to be a 100% fully functional facility with the EOF as a later activated support facility, so Point Beach chose to maintain all risk significant planning standard function responsibility in the TSC, which has simplified training and improved consistency in performance. NextEra Common Emergency Plan was informed by these experiences.

Supervision of Radiation Protection Staff and Site Radiation Protection Function

RAI 17. All NextEra Sites

Section 3.2.7, "No OSC RP Supervisor Position," of the LAR states:

The Lead OSC Supervisor is assigned the RP aspect of the Supervision of Repair Team Activities. To ensure that Lead OSC Supervisor position can perform the RP supervision sub-function, their ERO training / qualification program will include previous RP Supervisor experience or will receive training to supervise RP emergency response tasks. See Section O of the proposed emergency plan for the description of the qualification of the Lead OSC Supervisor.

Section O of the proposed NextEra Common Emergency Plan states:

The lead OSC supervisor is trained to perform RP supervisory tasks. [No further detail is apparent.]

Issue: The NextEra LAR does not provide sufficient information for the NRC staff to conclude that previous experience or training to perform RP supervisory tasks would ensure that the lead OSC supervisor would be qualified and proficient to perform the RP supervision function. Additionally, the LAR does not provide objective evidence that the OSC supervisor could concurrently perform the lead OSC supervisor and RP supervisor functions.

Request: Provide the following clarifications regarding the OSC RP supervisor:

- a. Provide objective evidence that a qualified and proficient RP supervisor will be available at the OSC within 90 minutes of an alert or higher declaration.
- b. Provide objective evidence that one individual can concurrently perform the lead OSC supervisor and RP supervisor functions.

RESPONSE

NextEra has determined that resolution of this item is most efficiently accomplished through transitioning it to an audit process.

RAI 18. All NextEra Sites

Section 3.3.5, "TSC RP Coordinator at 90 Minutes," of the LAR states:

This function is important for effective emergency response to a radiological event because the management of RP resources, and the assistance this position provides the Emergency Coordinator, is crucial for response to radiological events. Radiological events can be very significant and constantly evolving and require significant expertise in radiation and radiological consequences. The evaluation of radiological events, and the development of effective protective action recommendations, requires this expertise to support the Emergency Coordinator in making these decisions. This position is also responsible for the direction and protection of FMTs. The augmentation (relief) of this function should occur within 60-minutes of an Alert ECL, or greater, and is typically staffed in the TSC.

Additionally, Section 2.2.5, "TSC RP Coordinator at 90 Minutes," of the supplement states:

The AOP/EOP procedure sets have specific guidance for direction and control of RP/QI resources during an event. The shift manager has the authority to provide immediate dose extensions for life saving, facility saving, or prevention/mitigation of release. This decision is informed by the rest of the operating crew and procedure sets.

And,

Performing a comparative task analysis (refer to Analysis 1) between the Shift Manager and the Site RP Coordinator [SRPC], the tasks are same / similar between the SM and SRPC. Where there is a gap is with experience. Experience cannot be mitigated with training as the knowledge requirements for the positions are same/ similar. Experience is mitigated through procedure use and adherence. As outlined above, all NEE [NextEra] sites have AOP/EOP sets that are based off most recent PWR Owner's guidance which incorporates industry best practices, including RP direction.

Issue: The NextEra LAR does not provide sufficient information for the NRC staff to conclude that significant expertise in radiation and radiological consequences will be available within 60 minutes of an alert or higher declaration. The NextEra LAR does not provide sufficient information for the NRC staff to conclude based on similar emergency plan task descriptions for the shift manager and RP coordinator that "experience cannot be mitigated with training as the knowledge requirements for the position are the same/similar" and that "experience is mitigated through procedure use and adherence." Additionally, it is not clear to the NRC staff how the decision to provide immediate dose extensions could "be informed by the rest of the operating crew and procedure sets."

Request: Provide the following clarifications regarding the TSC RP coordinator:

- a. Although the NRC staff was able to locate information related to extending the augmentation time of the TSC RP coordinator in the LAR as supplemented, the staff could not find "Analysis 1" in either the LAR or the supplement. Provide Analysis 1 described in Section 2.2.5 of the LAR.
- b. Although the emergency preparedness tasks for the RP coordinator and shift manager are similar, the training and qualifications for a RP supervisor and a shift manager are not typically the same. Provide objective evidence that shift managers have the required "significant expertise in radiation and radiological consequences" to evaluate radiological events during the period from 60 to 90 minutes after an alert or higher declaration.
- c. Explain how NextEra EOP/AOP sets can provide "significant expertise in radiation and radiological consequences" could mitigate the experience of the shift manager. This explanation should include specific examples demonstrating that the NextEra EOP/AOP sets contain significant expertise in radiation and radiological consequences.
- d. Explain how the operating crew and procedure sets could inform shift manager decisions related to immediate dose extensions for life saving, facility saving, or prevention/mitigation of release. This explanation should include objective evidence that the operating crew could provide the shift manager with "significant expertise in radiation and radiological consequences" to evaluate the radiological consequences related to these decisions.
- e. Provide objective evidence that no events would exist that may require significant expertise in radiation and radiological consequences for 90 minutes following the declaration of an alert or higher declaration or explain who will provide significant expertise in radiation and radiological consequences within 60 minutes of an alert or higher declaration.

RESPONSE

NextEra has determined that resolution of this item is most efficiently accomplished through transitioning it to an audit process.

Dose Assessment/Projection Function

RAI 19. All NextEra Sites

Point Beach Analysis #4 line 210 of the LAR supplement states the shift dose assessor function can be assigned as a collateral duty to any on-shift position.

Issue: There is no designated on-shift individual available to perform the dose assessment function. The NRC staff could not determine if there was sufficient on-shift capability to perform the dose assessment function. Note: this focuses on on-shift capability of the dose assessment function and not on the timing of relief and augmentation.

Request: Concerning the dose assessment function, provide the following:

- a. Provide clarification that describes who is expected to perform the dose assessment function for alert or greater declarations. Your discussion should not rely on concurrent performance by individuals required to perform other functions such as fire brigade, plant operations during off-normal conditions, and the concurrence performance of ERO functions such as command-and-control.
- b. Explain how NextEra determined that performance of the dose assessment function could be performed as a collateral duty for the shift manager, on-shift SROs responsible for the direction of licensed operators, or auxiliary operators required to support plant operations as described in NextEra technical specifications or the fire brigade. If NextEra has an individual capable of performing dose assessment that is not required to concurrently perform concurrent actions in response to the event, describe that individual and explain where that capability is reflected in the proposed NextEra Common Emergency Plan.

RESPONSE

- a. The specific position performing initial dose assessment may vary, but the intent is to train all field operations personnel such that it is a task assigned by the Shift Manager (SM). NUREG-0654 clearly states that dose assessment may be a collateral duty.
- b. As stated above, the dose assessment function is a collateral duty assigned by the SM to field auxiliary operators. The intent of the statement in the submittal was simply to give maximum flexibility to the SM to utilize available staffing, depending on the specific needs of the scenario. The SRO positions on shift are not expected to perform on-shift dose assessment functions during an event.

RAI 20. All NextEra Sites

Issue: The NRC staff could not determine if there was sufficient on-shift capability to perform the dose assessment function.

Request: Concerning the Dose Assessment function:

- a. Provide clarification that identifies a specific individual to perform the dose assessment function for alert or greater declarations prior to ERO augmentation. Note: this clarification should not rely on concurrent performance by individuals required to perform other functions such as fire brigade, plant operations during off-normal conditions, and perform ERO functions such as command-and-control.
- b. Provide an evaluation based on an analysis that explains how NextEra determined that performance of the dose assessment function could be performed as a collateral duty for the shift manager, on-shift SROs responsible for the direction of licensed operators, or auxiliary operators required to support plant operations as described in NextEra technical specifications or the fire brigade.
- c. If an evaluation is not available, identify an individual capable of performing dose assessment that is not required to concurrently perform other actions in response to the event, revise the proposed NextEra Common Emergency Plan accordingly.

RESPONSE

The specific position performing initial dose assessment may vary, but the intent is to train all operations personnel such that it is an assigned task of the Shift Manager (SM). NUREG-0654 clearly states that dose assessment may be a collateral duty.

As stated above, the dose assessment function is a collateral duty assigned by the SM. The intent of the statement in the submittal was simply to give maximum flexibility to the SM to utilize available staffing, depending on the specific needs of the scenario.

NextEra Energy performed site specific On-shift Staffing Analyses per the NRC endorsed accepted method document (NEI 10-05). Per NEI 10-05, detailed analyses demonstrating that on-shift personnel assigned emergency plan implementation functions are not assigned responsibilities that would prevent the timely performance of their assigned functions as specified in the emergency plan. The analyses ran the sequence of tasks out to 120 minutes and included the STA functions/tasks. The result of the analyses:

- a. The task analyses did not identify non validated tasks that were performed by the on-shift positions.
- b. The task analyses did identify potential task overlaps in the events that were analyzed.
- c. The task timing study resolved the potential task overlaps in the events that were analyzed. Emergency response tasks were performed sequential with other tasks such that no overlap or overburden occurred.

RAI 21. All NextEra Sites

Point Beach Analysis #4 line 166 of the supplement states that the TSC radiation protection coordinator is responsible for effluent release and dose assessment.

Point Beach Analysis #4 line 212 of the supplement states that the EOF radiation protection coordinator is responsible for effluent release and dose assessment.

Point Beach Analysis #4 line 320 of the supplement states that the EOFs primary functions include coordinating emergency response activities with federal, state, and local authorities, the performance of offsite dose assessment and field monitoring activities, and the development of dose based offsite protective action recommendations.

Issue: The NRC staff could not determine how the dose assessment function would be controlled and coordinated. The LAR describes that dose assessment would be controlled and coordinated from the EOF but yet, the dose assessments and associated protective actions are also described at the TSC.

Request: Concerning the dose assessment function, provide the following:

- a. Clarify how dose assessment will be controlled and communicated. Your discussion should identify who would be the primary individual providing oversight for dose assessment and explain how the results, including protective action recommendations, would be communicated to the site emergency director at the TSC.
- b. Provide an evaluation through an analysis that explains how NextEra determined that the proposed NextEra Common Emergency Plan would not introduce potential delays in dose assessment development and communication of PARs to the OROs. In your discussion address the apparent dose assessment/PAR communication process from the EOF, which is responsible for dose assessment and PAR development, to the TSC; who is the individual responsible for overall emergency response, back to the EOF from the TSC; and who is responsible for coordinating response activities with federal, state, and local authorities.

RESPONSE

Analysis 4 is used to compare ERO responsibilities from the current Emergency Plan to the Common Emergency Plan and Site Annexes. The ERO responsibilities listed are written as a brief description of the function/task the ERO position is involved in. In many cases, multiple ERO positions have a part in fulfilling a particular responsibility. For example, dose assessment is performed on-shift, remotely, and in the EOF. Input and output data of dose assessment involves the Shift Manager/Emergency Director, TSC Radiation Protection Coordinator, and EOF Radiation Protection Manager.

For the proposed emergency plan, once the emergency is declared, the on-shift Dose Assessor will start performing rapid dose assessment. The on-Shift Dose Assessor will be

augmented by the Remote Dose Assessor within (no later than) 60 minutes of the declaration of an Alert. This will allow reassignment of the on-shift Dose Assessor to the communicator role until relieved by the TSC NRC Communicator. The Remote Dose Assessor will obtain data on-line and through a communications bridge network with the Reactor Engineer, who is also remote and responding within 60 minutes. As necessary, the assessment data will be transmitted to the Shift Manager/Emergency Director.

Within 90 minutes of the declared emergency, the EOF Dose Assessor will be activated. All dose assessors are working together through a communications bridge network to share information freely in real time. The remote dose assessor, the EOF dose assessor, TSC Radiation Protection Coordinator, and EOF Radiation Protection Coordinator are in communication with each other. Others (field monitoring teams, state/county radiological protection, NRC health physics/ protective measures) may be invited onto this communications bridge depending on the event in progress.

As part of the command and control turnover process between the Shift Manager, Emergency Director, and EOF Manager, dose assessment responsibility will be discussed and accountability turned over to the EOF Manager's team in the EOF with the EOF RP Manager responsible for the task.

If the ORO or NRC dose assessment team(s) report to the EOF, the EOF Dose Assessor can work directly with the dose assessment teams.

The TSC, as described in NUREG-0654 rev 2 table B1, is a fully capable facility with the EOF as a support facility. The TSC Radiation Protection Coordinator is the primary conduit of the dose assessment team to the Site Emergency Coordinator in the TSC. The Site Emergency Coordinator maintains the non-delegable functions of classification and protective action recommendations (PARs). The EOF has responsibility for dose assessment, and the use of bridge communications network provides the TSC Site RP Coordinator the information, without delay, to be utilized in the classification / PAR development process. This process is similar to dose assessment being performed in a separate adjacent room and the dose assessment results being printed and hand delivered to the RP Manager/Coordinator. Except for the PAR notification (performed by the TSC via the electronic communication process discussed in response to RAI 16), the EOF is responsible for any coordinated response activities with federal, state and local authorities.

This process, including the dose assessment communications bridge, maintaining classification, notification, and PARs is currently performed at Point Beach Nuclear Plant using NUREG-0654 revision 2 Table B1 staffing since October 2019. No issues have been noted in dose assessment classification or PAR development using this process since October 2019.

Emergency Classification Function

RAI 22. All NextEra Sites

Issue: Point Beach Analysis #4 line 212 of the LAR supplement states that the TSC classification advisor is responsible for State and local event notification, facility/group

management and supervision, facility activation and operations, and ERO radiological protection. Although the classification advisor can be assigned collateral duties that are within the capability for an individual to perform at any given time, it is not clear to the NRC staff that the TSC classification advisor would be qualified and capable to perform all tasks designated in the NextEra Common Emergency Plan at any given time.

Request: Provide an evaluation through an analysis that the TSC classification advisor can perform all the functions identified in the NextEra Common Emergency Plan for the TSC classification advisor without potentially delaying event classification and protective action recommendations.

RESPONSE

NextEra has determined that resolution of this item is most efficiently accomplished through transitioning it to an audit process.

RAI 23. All NextEra Sites

Section 3.3.2, "Classification Advisor at 90 minutes," of the LAR states,

The augmentation (relief) of this function [classification advisor] should occur within 60-minutes of an Alert ECL, or greater, and is typically staffed in the TSC. Maintaining the ability to perform this function at all times ensures that ECL decisions, and as applicable, the PAR decisions, are timely and accurate as these decisions have a direct relationship to public health and safety from the consequences of a radiological event. This function shall work in coordination with the OSM, or Emergency Coordinator, depending on which position is in command and control, and as a result should be available on shift and in the TSC.

Issue: The proposed NextEra LAR provided justification that could eliminate the on-shift classification advisor but did not provide a justification that supports either the extension or elimination of the classification advisor at the TSC.

Request: Provide objective evidence that establishing a 90-minute requirement for the TSC classification advisor would not impact the ability to perform the classification function at the TSC.

RESPONSE

NextEra has determined that resolution of this item is most efficiently accomplished through transitioning it to an audit process.

Engineering Function

RAI 24. All NextEra Sites

Issue: Section 3.4.2, "On-Shift ERO Positions," of the LAR states that the STA and classification advisor functions are performed as collateral duties.

Request: Regarding on-shift ERO staffing:

- a. Explain who would perform the STA function.
- b. Explain who would perform the shift classification advisor function. Your discussion should specifically address the NextEra site-specific Technical Specifications and the proposed NextEra Common Emergency Plan that does not require a designated individual to perform the shift technical advisor function. The LAR describes that the only required individuals with the capability to perform the shift classification advisor function are the operating supervisors and the shift managers. Neither the operating supervisor nor the shift manager would be available to provide classification advice to the shift manager/emergency director during radiological events.

RESPONSE

In accordance with Table B1 from NUREG-0654 R2, the Core/Thermal Engineer (STA) is a single person that can perform their function as a collateral duty. The STA function is performed by designated on-shift personnel, who meet the educational requirements for an STA. NextEra Energy uses individuals with an SRO license to perform this function. Normally, this function will be completed by the Shift Manager. In the event that the Shift Manager does not have the qualifications for the position, another shift person, with appropriate qualifications, will provide this function.

The Event Classification Advisor (ECA) functions will be assumed by an SRO from the unaffected unit (PBN, PSL and PTN) or another on-shift qualified individual.

NextEra Energy performed site specific On-shift Staffing Analyses per the NRC endorsed accepted method document (NEI 10-05). Per NEI 10-05, detailed analyses demonstrating that on-shift personnel assigned emergency plan implementation functions are not assigned responsibilities that would prevent the timely performance of their assigned functions as specified in the emergency plan. The analyses ran the sequence of tasks out to 120 minutes and included the STA / ECA functions/tasks. The result of the analyses:

- a. The task analyses did not identify non-validated tasks that were performed by the on-shift positions.
- b. The task analyses did identify potential task overlaps in the events that were analyzed.
- c. The task timing study resolved the potential task overlaps in the events that were analyzed. Emergency response tasks were performed sequential with other tasks such that no overlap or overburden occurred.

Security Function

RAI 25. All NextEra Sites

Section 3.3.10, "Security Liaison at 90 minutes," of the LAR states:

The licensee's Security Force is controlled and maintained by the licensee's NRC approved physical security plan and does not need to be reflected in the Emergency Plan. However, the establishment of a Security Liaison position in the TSC is advantageous to ensure effective coordination between the security force and the ERO, particularly for events where offsite resources are necessary as well as for security related events and site personnel accountability. The augmentation (support) of this function should occur within 60-minutes of an Alert ECL, or greater, and is typically staffed by a Security Liaison in the TSC to coordinate security-related activities with that of the ERO.

This section further states:

The Security Liaison position provides communication and coordination resources that are not needed until the TSC and OSC are augmented at the 90-minute point in time.

NUREG-0654 provide guidance for a Security Liaison to respond within 60 minutes of an alert or greater declaration.

Issue: Security related events and events where offsite resources are necessary could occur within 60 minutes of an alert or greater classification. The proposed changes to TSC and OSC staffing times described in the LAR does not justify the proposed adjustment of the security liaison augmentation time from 60 to 90 minutes.

Request: Provide objective evidence that the Security Liaison will not be required for 90 minutes. Your discussion should address security related conditions that could require offsite resources, coordination, or personnel accountability within 60 minutes of an alert or higher declaration.

RESPONSE

NextEra has determined that resolution of this item is most efficiently accomplished through transitioning it to an audit process.

Repair Teams Activities Function

RAI 26. All NextEra Sites

Section 3.3.9, "OSC Craft at 90 minutes," of the LAR states:

Due to the availability of FLEX equipment, NextEra stations have diverse protection against loss of ECCS capability and other systems, which provides a

basis for determination that no immediate ECCS repair and corrective actions are likely necessary for on-shift personnel prior to augmentation of maintenance personnel.

This section further states:

By accounting for FLEX equipment and strategies that eliminate or prolong the onset of core damage and any radiological release of activity the RP challenges are simplified and the need for a 60-minute radiation protection personnel response is diminished.

The FLEX strategy, as codified by 10 CFR 50.155, provides mitigation strategies for beyond design basis external events and for mitigation strategies for a loss of large areas of the plant impacted by the event, due to explosions or fire.

Issue: The NextEra LAR does not provide sufficient information that the use of FLEX equipment provides a basis supporting the NextEra determination that "no immediate ECCS repair and corrective actions are likely necessary for on-shift personnel prior to augmentation of maintenance personnel" for a broad spectrum of events.

Request: Provide the following clarifications regarding the NextEra FLEX strategy:

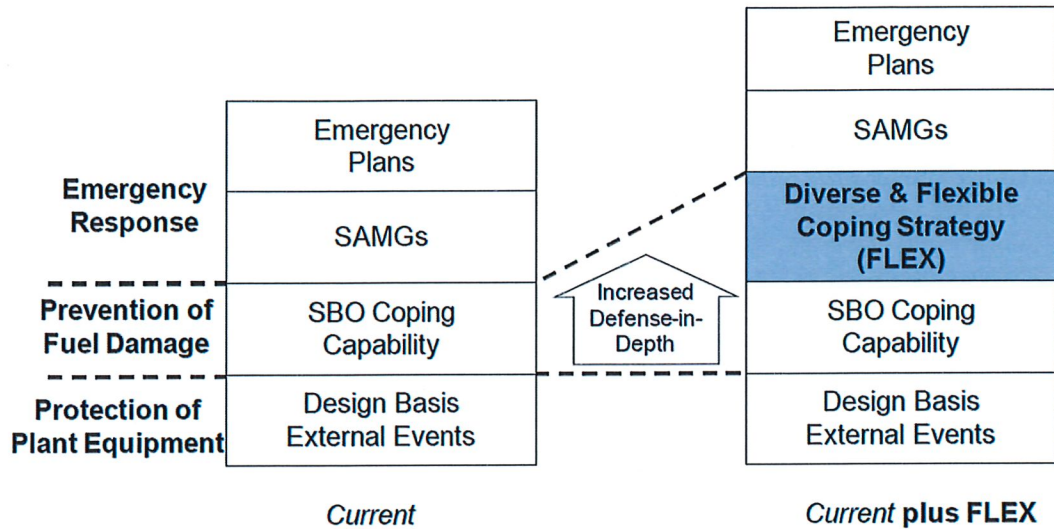
- a. In addition to the requirements of 10 CFR 50.155 and based on an evaluation of an analysis, could the NextEra FLEX strategies be used to mitigate a broad spectrum of events in addition to design basis external events and large area of the plant loss due to explosions or fire?
- b. Provide objective evidence that FLEX strategies are sufficiently effective and reliable to justify extending the response times of ERO augmenting mechanical and electrical technicians.

RESPONSE

Per NEI 12-06, Diverse and Flexible Coping Strategies (FLEX) Implementation Guide, Revision 4, dated December 2016 (endorsed by the NRC in Regulatory Guide 1.226, Flexible Mitigation Strategies for Beyond-Design-Bases Events, Revision 0, Dated June 2019) (Revision 5, dated April 2018 not endorsed), the objective of FLEX is to establish an indefinite coping capability to prevent damage to the fuel in the reactor and spent fuel pools and to maintain the containment function by using plant equipment and FLEX equipment. The FLEX strategies are focused on maintaining or restoring key plant safety functions and are not tied to any specific damage state or mechanistic assessment of external events. A safety function-based approach is in keeping with the symptom-based approach taken to plant emergency operating procedures (EOPs) and facilitates the utilization of the FLEX strategies in support of the operating and emergency response network of procedures and guidance. Flex strategies will be used to supplement (not replace) the previously existing procedure structure that establish command and control of events (e.g., AOP, EOP, SAMG, etc.).

Implementation of the FLEX equipment, procedures and processes significantly extends the timeline even with failed safety related equipment. This time extension is listed in NEI 12-6 and validated/evaluated to 6 hours. NEI 12-06 Figure 1-1 depicts the time extension.

**Figure 1-1
FLEX Enhances Defense-in-Depth**



The program controls which address the reliability of the FLEX equipment are addressed in NEI 12-06. Section 50.155(c)(2) requires that the equipment relied upon for the mitigation strategies required by § 50.155(b)(1) be reasonably protected from the effects of natural phenomena that are equivalent in magnitude to the phenomena assumed for developing the design basis of the facility. Per Regulatory Guide 1.226 Section 3.4:

Section 11.5.4 of NEI 12-06, Revision 4, discusses the programmatic controls for equipment and connections between that equipment and permanently installed SSCs. These controls include limited time periods in which the equipment and connection points may be non-functional for any reason, with the duration of the acceptable time period being based on the ability of the licensee to accomplish the intended function of the equipment by other means.

The NRC Staff's position per Regulatory Guide 1.226:

Section 11.5.4 of NEI 12-06, Revision 4, provides an acceptable method for controlling durations for which the equipment is nonfunctional or not in its specified reasonable protection configuration to satisfy those elements of reasonable protection.

Regulatory Guide 1.226 Section 3 discusses other aspects of "reasonable protection" including:

- Evaluation and protection from External Hazards
- Deployment of Equipment
- Programmatic Controls for Functionality
- Equipment Maintenance

- Configuration Control
- Coordination with Severe Accident Management Guidelines

Therefore, based upon the FLEX strategies supporting and being integrated into the operating and emergency response network of procedures and guidance, FLEX strategies would (as necessary) be used to mitigate a broad spectrum of events. In addition, NextEra Energy protects and maintains the FLEX equipment per 50.155(c)(2) ensuring the strategies are maintained effective and reliable.

Supervision of Repair Teams Activities Function

RAI 27. All NextEra Sites

Section 3.2.8, "Single Craft Supervisor Position," of the LAR states,

An Electrical Supervisor, a Mechanical Supervisor, and an I&C Supervisor ... should be staffed within 90-minutes of an SAE ECL, or greater, and is typically staffed in the OSC. The OSC Supervisor can effectively manage the craft [personnel] resources for the additional 30-minutes prior to the [supervisory] respond, as demonstrated through drills and exercises, without compromising the staff's reasonable assurance finding in accordance with 10 CFR 50.47(a).

This section further states:

The position of FIN Supervisor is filled by management and supervisory personnel from the Maintenance Department who are familiar with direction of all disciplines within the department.

Issue: The NextEra LAR does not provide sufficient information that the lead OSC supervisor would be qualified and proficient to manage multiple maintenance disciplines at all NextEra facilities.

Request: Concerning the proposed FIN supervisor:

- a. Provide objective evidence that a single FIN supervisor is qualified and proficient to supervise the mechanical and electrical/instrument maintenance technicians. Does NextEra currently use a single FIN supervisor for the mechanical and electrical/instrument maintenance technicians at Point Beach and Seabrook?
- b. Provide objective evidence that a FIN supervisor can concurrently provide supervision for the mechanical and electrical/instrument maintenance technicians during an event at Point Beach and Seabrook.

RESPONSE

NextEra Energy currently uses a Fix It Now (FIN) structure for maintenance with a single supervisor providing oversight of multiple disciplines. The NextEra Energy maintenance supervisor training does not differentiate between disciplines, so there is no discipline specific qualification for the supervisor role.

The NextEra Energy experience with the single supervisor structure in normal maintenance duties has been very effective. Each site has a FIN group that is effectively a non-emergency OSC – it receives priorities for the day from the Shift Manager and executes those tasks using a cross discipline team to ensure success. This provides reasonable assurance that one maintenance supervisor can perform the ERO Maintenance Supervisor functions, including oversight of OSC activities related to mechanical, electrical, and I&C equipment, within the proposed Common Emergency Plan.

The concept of a FIN Supervisor (single maintenance supervisor) structure promotes cross-disciplinary knowledge and has proven successful for maintenance activities at NextEra Energy. Craft supervisors are qualified to the same level across NextEra Energy Nuclear. Individual knowledge of a specialty is used to determine what normal group they lead; however, any maintenance supervisor can provide direction to any craft discipline.

This concept is consistent with NUREG-0654 Revision 2 Table B1 with the combination of the I&C and electrical disciplines. The NextEra Energy Common Emergency Plan utilizes the normal FIN team alignment to cover all roles – mechanical, electrical, and I&C. Craft workers are still brought in based on their profession / discipline.

Field Monitoring Teams Function

RAI 28. All NextEra Sites

Section 3.2.6, "No On-site Field Monitoring Team," of the LAR states:

The ability to locate, monitor, and track a radioactive plume is important to ensure appropriate protective measures are taken in response to a radiological event. The ability to staff these teams before they may be needed (i.e., before a radiological release) greatly enhances the ability of the licensee to provide timely and accurate PARs.

This section further states,

Based upon NRC guidance two Field Monitoring Teams are sufficient to monitor radiological conditions after a SAE is declared. By not designating onsite and offsite FMTs, a total of two FMTs can sufficiently provide radiological monitoring at NextEra stations under all conditions.

Issue: The proposed NextEra Common Emergency Plan does not provide the capability to perform on-site field monitoring within 60 minutes of an alert or higher declaration.

Request: Provide objective evidence that NextEra facilities can assess the protected area for radiation and contamination during radiological events within 60 minutes of an alert or higher declaration.

RESPONSE

NextEra has determined that resolution of this item is most efficiently accomplished through transitioning it to an audit process.

RAI 29. All NextEra Sites

Section 3.2.6, "No On-site Field Monitoring Team," of the LAR states:

For NextEra stations, two Field Monitoring Teams are sufficient to perform on-site and off-site field monitoring activities. All NextEra sites are located on major bodies of water (their EPZs being approximately 40% water or greater) with no requirements nor capabilities for monitoring activities on these bodies of water. As each site's EPZ is ~40+% water, there is not as much area to cover for the field monitoring teams. With NextEra EPZs being effectively smaller than landlocked sites, less personnel are needed to cover an effectively smaller EPZ.

Issue: The NextEra LAR states that the NextEra EPZs are effectively smaller than landlocked sites which require less personnel to cover the smaller EPZ.

Request: Provide clarification regarding the effectively smaller EPZ and NextEra sites. The clarification should address the following:

- a. Explain whether the ~40+% water within 10 miles of the NextEra sites is considered as part of the EPZ.
- b. Explain how radiation monitoring and/or dose assessment is performed for the ~40+% water within 10 miles of the NextEra sites.
- c. If NextEra does not perform radiation monitoring and/or dose assessment for the ~40+% water within 10 miles of the NextEra sites, explain how protective action recommendations can be made for members of the public who may be on, or in, the water within 10 miles of NextEra sites.

RESPONSE

The Emergency Planning Zone (EPZ) for each NextEra Energy site is the full radius 10 miles around the site. The current emergency plans at NextEra Energy sites do not have direct monitoring capability for the water portion of the EPZ, which makes up ~40% of the EPZ of each site. The current field monitoring teams are ground based and do not directly monitor the 40% of EPZ, which is water based. NUREG-0654 Revision 2 Table B1 was built not only as an all hazards response, but also includes elements that incorporate all reactor types and is location agnostic. A land locked licensee may have a need for 3 field monitoring teams as outlined in table B1; however, a coastal licensee can have less FMTs in the same way as that nuclear plant which is completely islanded with a 99% water EPZ can be expected to request to have only a single FMT with onsite responsibilities only. The reduction from three field monitoring teams to two is based on all NEE sites being coastal sites.

Offsite response organizations have capabilities in place to alert and notify the 10 mile EPZ after the licensee notifies them of a protective action recommendation or they determine a protective action decision based on their own processes apart from licensee PAR.

The water based Protective Action Decision (PAD) component varies based on state/county emergency management Memorandums of Understanding (MOUs) with federal, tribal, state, and local agencies, but they do include a means for notifying mariners (transients) in the water portions of the EPZ. Preplanned PARs from the sites do not exclude water based areas and protective action decisions from local agencies cover water based areas. As the PAD process is outside of NextEra Energy control, it is not discussed in the NextEra Energy Common Emergency Plan.

Dose assessments completed by NextEra Energy incorporate wind speed and direction into the dose assessment. The output of the software does not limit the assessment based on whether the wind is blowing out to sea (or lake). The wind direction informs which sectors to evacuate/ shelter.

RAI 30. All NextEra Sites

Section 3.2.6, "No On-site Field Monitoring Team," of the LAR states:

Based upon NRC guidance two Field Monitoring Teams are sufficient to monitor radiological conditions after a SAE [site area emergency] is declared.

NUREG-0654 describes that one onsite field monitoring team (FMT) and one offsite FMT will be available within 60 minutes of alert or greater classification.

Issue: The LAR provides field monitoring team (FMT) augmentation following a site area emergency or greater classification that is not consistent with NUREG-0654 guidance that follows an alert or greater classification.

Request: Provide the following clarifications regarding FMT augmentation.

- a. If NextEra is proposing to staff field monitoring following the declaration of a SAE or greater, provide a basis supporting this deviation from staffing field monitoring following the declaration of an alert or higher as provided in NUREG-0654.
- b. Provide an evaluation of an analysis that explains how one FMT will concurrently perform both the onsite and offsite FMT functions.

RESPONSE

NextEra Energy is proposing that following the declaration of an Alert or greater classification, use of two field monitoring teams (FMT) for both onsite and offsite functions, not eliminating the onsite function. The differentiation of onsite and offsite causes confusion among the ERO staff. NextEra Energy will continue to meet NUREG-0654 by having two FMTs, staffed at an Alert or greater classification. The deployment of those teams will be guided by procedures and the decisions of the ERO.

The NUREG-0654 R2 Section B Tech Basis (ML16117A427) outlines the technical thinking regarding certain positions for NUREG-0654 R2 Table B1. Under onsite FMTs, it is stated that:

The onsite FMT should not be staffed if the radiological conditions jeopardize the safety of the FMT, typically after a Site Area Emergency has been declared.

Additionally:

An offsite FMT should be staffed, consisting of a monitor and a driver. This offsite FMT is responsible for locating, monitoring, and tracking a radioactive plume, as well as obtaining environmental samples as necessary (air, water, vegetation, etc.). This team should be staffed within 60-minutes of an Alert ECL, or greater classification, in order to be ready to respond to a radiological release, or to detect radiation in the field thus confirming and quantifying the release. This supports the applicable PAR decision-makers in developing effective PARs.

In the proposed Common Emergency Plan, two FMTs will staff at an Alert classification level – one directed to perform onsite monitoring and one offsite monitoring. If SAE or greater is declared, both FMTs will conduct offsite monitoring upon indication of release, as they are not reasonably expected to enter radiological conditions that could jeopardize their safety as an onsite FMT.

Media Information Function

RAI 31. St. Lucie and Turkey Point Only

St. Lucie Analysis #4 line 111 of the LAR supplement states that the joint information center manager (JICM) operates from the EOF. Line 111 further references analysis #1 and analysis #2 for a detailed comparison analysis of the ERO positions, functions/tasks, and response time commitments of the Common Emergency Plan.

Turkey Point Analysis #4 line 122 of the LAR supplement states that the emergency information manager (EIM) operates from the EOF. Line 122 further references analysis #1 and analysis #2 for a detailed comparison analysis of the ERO positions, functions/tasks, and response time commitments of the Common Emergency Plan.

Issue: However, a review of analysis #2 for Turkey Point section 3.12.2 for emergency ERO staff and section 4.12, Key Function: Media Information, the staff could not identify any discussion regarding the removal of the EIM as a minimum staff position.

Analysis #2, St. Lucie and Turkey Point sections 3.12.2, "Minimum Staff ERO," and 4.12, "Key Function: Media Information," of the LAR supplement do not provide sufficient justification regarding the removal of the JICM and EIM as minimum staff positions. Additionally, no potential RIEs discuss the removal of the JICM and EIM.

Request: Provide the following for St. Lucie and Turkey point only:

- a. Provide a justification for removing the joint information center manager and emergency information manager as 60-minute ERO responders to the EOF. Note: the LAR as supplemented only provides an overview of the proposed ERO staffing and does not provide a justification or analysis that could support elimination of the JICM and EIM from the St. Lucie and Turkey Point emergency plans.

RESPONSE

The JIC Manager (JICM) and Emergency Information Manager (EIM) titles are being replaced with the Site JIS Manager and the Remote JIS Manager positions. The media information function and tasks are covered by the JIS Manager positions (Site and Remote) and therefore there are no potential RIEs.

Information Technology Function

RAI 32. All NextEra Sites

Section 3.2.9, "No IT [information technology] Technician ERO Positions," of the LAR states:

Per NUREG-0654 R2, minimum staff ERO IT positions are only required to be described in the emergency plan if critical digital assets (CDAs) are identified per 10 CFR 73.54, Protection of digital computer and communication systems and networks. The proposed emergency plan relies on PI ProcessBook for monitoring plant parameters, which has been determined to be a CDA.

This section further states,

Each of the EP related digital assets were evaluated as part of implementation of the Cyber Security Rule, 10 CFR 73.54(b). Under NEI 13-10, "Cyber Security Control Assessments," EP Critical Digital Assets have been assessed and controls have been put in place to protect the assets against cyber-attack. In conjunction with these controls, alternate administrative, non-digital, or adequately independent means have been put in place for performing each EP function, should the digital component or program fail.

Issue: The proposed NextEra Common Emergency Plan would rely on remote dose assessment and engineering. It is not clear whether the proposed changes were assessed as an EP critical digital asset.

Request: Provide a clarification that remote dose assessment and engineering were assessed as potential EP critical digital assets or provide objective evidence that demonstrates this assessment is not necessary.

RESPONSE

Identifying the PI Processbook in Enclosures 1 – 4 was an error. Per NEI 10-04, software itself is not classified as a CDA. PI Processbook therefore is not considered a CDA. The

digital assets that would be used by remote responding individuals to include Dose Assessors and Engineers are also not to be classified as critical digital assets if used exclusively by EP, with procedures in place to get the information using alternate means. This process is outlined in the most recent revision of NEI 10-04, which provided an avenue for screening digital assets that are used for EP functions. For the digital assets used by ERO members in the EOF or remotely, a determination shows that these digital assets would not fall under the critical classification as there are backup capabilities to obtain the information needed that is documented in procedures / manuals in use by the ERO.

Remote ERO Augmentation

RAI 33. All NextEra Sites

Section 3.8.1 of the LAR states:

ERO members responding remotely to an emergency are capable of performing all functions and tasks assigned to their positions, including support provided to other ERO members, as described in the emergency plan and implementing procedures. These positions support the on-shift staff prior to activation of the TSC and EOF.

Line 100 of Analysis 4 of the LAR supplement states:

The remote positions (Remote Dose Assessor and engineers) report to the Shift Manager until their associated response facility is activated.

The current ERO augmented dose response for NextEra sites include multiple individuals at a single facility. In addition to a dose assessor and an RP supervisor, the facilities include technical and communications personnel that provide appropriate plant and core status information to the dose assessor. NextEra proposes that the dose assessor and reactor engineer would provide augmentation remotely within 60 minutes of an alert or greater classification. The proposed NextEra Common Emergency Plan would have the supporting facility staff within 90 minutes of an alert or greater classification.

Issue: This LAR, as supplemented, would require the dose assessor and reactor engineer to rely on the control room staff for discussions related to the development of an accurate and timely dose assessment.

Request: Concerning remote dose assessment:

- a. Explain how the reactor engineer and dose assessor will obtain timely and accurate plant status.
- b. Explain how timely and accurate plant status communication to the dose assessor and reactor engineer was validated.
- c. Explain how the shift manager will concurrently provide operations oversight, oversight for the reactor engineer and dose assessor, and perform the command-and-control function.
- d. Explain how the shift manager would be able to maintain command-and-control of the emergency response organization and operating aspects of the facility while concurrently communicating with the remote dose assessor and reactor engineer with a

pre-established communication medium with the following attributes:

- Audio/visual communication,
 - Sharing screens/documents,
 - Ability to grant access to other ERO members and ORO agencies, and
 - Transfer capacity to handle any reasonably expected data and communications needs.
- e. Explain how the above communication attributes were validated for dose assessment in response to a spectrum of events including internet connection interruptions, loss of offsite AC power, and other Teams/internet interruptions.

RESPONSE

- a. The subject position functions can easily be performed remotely, given the availability of plant real-time information and programs through the corporate computer network.
- b. That same information is available in real-time today. In the event ERO is activated, personnel fulfilling these positions would be performing those tasks and accessing information the way that they do in routine performance of their normal jobs supporting fleet operations.
- c. The Shift Manager provides command and control for responders in an event until relieved of that duty by the Emergency Director. NextEra Energy routinely uses video and audio conferencing capabilities to leverage all necessary resources to support any of our sites during emergent and normal conditions. The use of that same technology for the ERO functions is no different. During the brief time period prior to arrival of an Emergency Director in the TSC, the Shift Manager will have command and control of all responding personnel.
- d. While the Shift Manager retains overall command and control until relieved by the responding Emergency Director, direction and communications with individual positions may be delegated to another available person, if those functions are immediately required. Current computer and conferencing capabilities in the Control Room and each of the Emergency Preparedness facilities provide technology that can accommodate all those tasks.
- e. As previously stated, those technologies are routinely used during day-to-day activities in support of fleet operations. Remote personnel have multiple locations from which they can perform those functions. Internet connection to the sites is robust and of high reliability. Power to the emergency facilities is also robust with backup capabilities.

RAI 34. All NextEra Sites

Section 3.8.1 of the of the LAR states that the following key considerations were evaluated when determining the remote ERO response positions and capability:

- Identification of ERO positions with assigned functions that can be successfully performed in a remote response environment. The position has capability of completing all functions and tasks assigned to the position, including support provided by other ERO members as described in the emergency plan and implementing procedures.
- Maintaining compliance with regulatory requirements applicable to the ERO.

- Evaluating changes to the approved and current site Emergency Plans and to the guidance in NUREG-0654.
- The impact that a remote response could have on the position's ability to effectively function within the reporting facility or team (e.g., a dose assessment team).
- The ERO response actions in various classified emergency events (example; Hostile Action event or severe weather).

Additionally, this section states:

If all else fails, personnel would respond to the NextEra corporate or station location/facility to perform the function remotely.

Although the LAR states that key considerations were evaluated, the LAR provides high level summary statement regarding the desired state without providing an objective evaluation based on an analysis that supports the proposed changes.

Issue: Because dose assessment relies on timely and accurate plant information, event progression information, and communicating the results of dose assessment, a failure of any of these elements could impact the ability of dose assessment. It is not clear what NextEra facility (corporate, or site location) would be available to perform the function remotely. Finally, there was no evaluation of how much time it will take to respond to these alternate facilities nor is it clear whether these facilities would provide the appropriate capability to support the dose assessment function.

Request: Concerning remote dose assessment:

- a. Provide the referenced evaluation demonstrating that remote dose assessment can successfully be performed.
- b. Provide the referenced evaluation regarding the impact of remote dose assessment on the dose assessment team.
- c. Although the LAR uses "If all else fails," it appears that remote dose assessment would require multiple elements to support dose assessment. Provide the evaluation demonstrating all required elements of dose assessment would reliably function at each remote ERO locations.

RESPONSE

- a. The dose assessment functions can easily be performed remotely, given the availability of plant real-time information and programs through the corporate computer network. Employees are issued laptop computers with the capability of remote access to the corporate network.
- b. That same information is available in real-time today. In the event ERO is activated, personnel fulfilling these dose assessment positions would be performing those tasks and accessing information the way that they do in routine performance of their normal jobs supporting fleet operations.
- c. Any member of the ERO who may be affected by a network or power outage preventing him or her from performing ERO functions, would simply travel to the normal work

location, which would either be the corporate office or one of the other sites for power and internet connectivity. The normal work location would be within the 90-minute activation time. Additionally, with numerous personnel having capability to respond, any local power or internet outages would not affect others who would also be responding remotely.

RAI 35. All NextEra Sites

Section 3.8.1 of the LAR states that the SAT process will be used to determine the initial and continuing training requirements. The training analysis will not be limited or focused on the remote ERO responders but also address the ERO responders interfacing with the remote responders.

Issue: Although the LAR states provides an approach to training that appears thorough, no details were provided that demonstrate that any training would be required to support remote ERO implementation.

Request: For remote dose assessment, provide the following:

- a. Explain whether remote ERO augmentation will be considered as part of accredited training programs pursuant to 10 CFR 50.120 or would otherwise follow the same SAT process as an accredited training program.
- b. Provide evidence that the NextEra SAT process was used to determine the required knowledges, skills, and abilities for the procedures required to implement remote ERO augmentation.
- c. Provide evidence that the initial and continuing training needs have been identified for the proposed NextEra remote ERO augmentation.

RESPONSE

- a. The remote ERO members will be part of the same training program as other members. That training program is developed following the Systematic Approach to Training (SAT) process, which will determine the knowledge and skills to design initial and continuing training requirements for all ERO positions, whether in an ERO facility or remote.
- b. Currently, procedures and processes are being developed for the Common Emergency Plan and once established, NextEra Energy will provide initial and continuing training, drills, and tabletop exercises to all personnel filling ERO positions, including the remote ERO personnel.
- c. Initial and continuing training have not yet been developed, but will follow the SAT process for all ERO positions, as previously stated.

NextEra Energy will not treat remote responders any differently from ERO responders at a site experiencing an event, as remote ERO positions will be filled by members from other Fleet sites and corporate staff members.

RAI 36. All NextEra Sites

Section 3.8.1 of the LAR states:

The following areas are examples which could be applicable based upon the remote ERO's responsibilities and task performance results:

- Risk-Significant Areas
 - Classification of events
 - Development of Protective Action Recommendations (PARs)
 - Assessment of offsite consequences

Issue: It was not clear to the NRC staff whether the LAR is asking to approve remote augmentation of classification of events, development of PARs, and assessment of offsite consequences in addition to the requested remote ERO augmentation for dose assessment and system engineering.

Request: provide the following:

- a. Clarify whether the risk significant areas for classification of events, development of PARs, and assessment of offsite consequences are intended as performance determination criteria or were included as requests for additional remote ERO augmentation consideration.
- b. If NextEra intended prior NRC staff approval for remote ERO augmentation for these positions, provide a justification that supports the remote ERO augmentation of these risk significant functions.

RESPONSE

NextEra Energy does not intend for any risk significant functions to be performed remotely. Classification of events, PAR development, and assessment of offsite dose will not be completed remotely.

RAI 37. All NextEra Sites

Section 3.8.1, "Added Allowance for Remote Response of Engineering and Dose Assessment Function," proposed remote response for the reactor engineer, mechanical engineer, electrical engineer, and the dose assessor.

Section 3.8.1 of the LAR states:

ERO members responding remotely to an emergency are capable of performing all functions and tasks assigned to their positions, including support provided to other ERO members, as described in the emergency plan and implementing procedures. These positions support the on-shift staff prior to activation of the TSC and EOF.

Issue: The current NextEra augmented dose response includes multiple individuals at a single facility. In addition to a dose assessor and an RP supervisor, the facilities include technical and

communications personnel that provide appropriate plant and core status information to the dose assessor. NextEra proposes that the dose assessor and reactor engineer would provide augmentation remotely within 60 minutes of an alert or greater classification. The proposed NextEra Common Emergency Plan would have the supporting facility staff within 90 minutes of an alert or greater classification.

Request: Concerning remote dose assessment:

- a. Provide objective evidence that significant changes to dose assessment would not potentially delay timely and accurate dose assessment until the EOF is augmented within 90 minutes of an alert or greater classification.
- b. Provide objective evidence that remote performance of the reactor engineering would not potentially delay timely and accurate dose assessment.
- c. Provide objective evidence that short-term internet interruptions/degradations would not cause delays or inaccuracies in remote dose assessment.

RESPONSE

The reactor engineer and dose assessor working remotely, will be able to obtain the necessary real-time data and programs on-line to perform their functions in a timely fashion. The remote ERO and on-shift staff will be in constant communication via conference call using modern technology of voice, video, and sharing of screens. This type of communication system is available through multiple platforms and is currently in use for day-to-day business.

- a. & b. The remote ERO positions will obtain data in real time and report analytical conclusions in real time, as described above. Consequently, there will be no time lag resulting from remote performance. The initial response by remote personnel will be to supplement on-shift staffing. As such, they will communicate directly with Control Room personnel until TSC is staffed. Information used by remote personnel would primarily come from electronic data via internet connection. Additional information may be provided by Control Room staff via conference call, which would be transferred to TSC when it is staffed. Therefore, no delay is anticipated.
- c. Upon activation, the responding remote personnel would all join a conference bridge. Since all ERO members are expected to respond upon activation, there will be additional remote responders, such that if one person experiences internet or power interruption, another person would seamlessly pick up tasks. The brief time it would take to transfer tasks would not result in appreciable delay in any critical information.

RAI 38. All NextEra Sites

Issue: In the LAR, as supplemented, the proposed NextEra Common Emergency Plan includes remote joint information system (JIS) staff within 60 minutes of an alert or greater classification. Other than the inclusion of this remote augmentation position in the NextEra Common

Emergency Plan, no additional justification was apparent. The proposed NextEra Common Emergency Plan does not include dedicated on-shift communicators or a site emergency director for 90 minutes.

Request: Explain how the media information function can be completed remotely by a single individual. Your discussion should describe how the JIS individual would obtain the appropriate information without burdening the shift manager as well as describing how the JIS remote responder would communicate the information as needed.

RESPONSE

NextEra Energy, as part of normal business, employs a 24-hour media hotline to address any media concerns. This number is distributed to all local media representatives through NextEra Energy Nuclear Communications group.

A part of ERO activation process is to activate the corporate Joint Information System manager (not minimum staff and therefore not discussed as part of the emergency plan). That role is to support the site with all required corporate resources. The corporate JIS manager has professional marketing and communications staff available that performs communications work for the company as their primary occupation. Using the company standard processes, they can issue press releases internally known as a standby statement that generically explains the emergency classification level and points media questions to the media hotline. This statement will go out on newswire to provide a central gathering point for media requests for information and/ or action. There is a site communications representative that will be the point of contact for corporate JIS staff until the ERO is activated. The site communications representative is engaged with site senior leadership daily and will use their resources and relationships to get any information needed before ERO activation. As initial standby statements do not contain details of the event other than classification level no additional information is needed from the control room staff. The normal process (non-emergency) is for the communications staff to obtain information from site management, which would be the same for emergency declarations until the ERO is staffed.

RAI 39. All NextEra Sites

Issue: Table B-1, "On-Shift and Augmenting ERO Staffing Plan," of the LAR includes a note stating that JIC/JIS staff to address media inquiries does not need to be performed in the joint information center (JIC), but the joint information system function needs to be established at this point. This note is not consistent with the note in NUREG-0654 stating the JIC/JIS staff does not need to be in the TSC/OSC.

Request: Provide the following for the Media Information function:

- a. Explain who will be available to address media inquiries within 60 minutes of an alert or greater.
- b. Provide objective evidence that extending the on-shift shift manager responsibility to address media inquiries for an additional 30 minutes would not potentially overburden

the shift manager.

RESPONSE

- a. NextEra Energy, as part of normal process, employs a 24-hour media hotline to address any media concerns. This number is distributed to all local media representatives through NextEra Energy Nuclear Communications group.
- b. A part of ERO activation process is to activate the corporate Joint Information System manager (not minimum staff and therefore not discussed as part of the emergency plan). That role is to support the site with all required corporate resources. The corporate JIS manager has professional marketing and communications staff available that performs communications work for the company as their primary occupation. Using the company standard processes, they can issue a press release that generically explains the emergency classification level and points media questions to the media hotline. This statement will go out on newswire to provide a central gathering point for media requests for information and/ or action. The Shift Manager is not responsible for media relations. Control Room phone numbers are not public numbers.

In accordance with NUREG-0654 revision 2 table B1, there is no media responsibility required on-shift.

Other

RAI 40. All NextEra Sites

Section 3.1, "Technical Advancements and Program Enhancements" of the LAR states:

These improvements collectively support the overall conclusion that there would be no degradation or loss of function resulting from the proposed [NextEra site] emergency plan.

Issue: In the LAR, as supplemented, NextEra provided a list of improvements but did not provide objective evidence supporting a substantial increase in emergency response organization response time. Because NUREG-0654 was issued in December of 2019, all the listed improvements identified in the LAR, except for FLEX strategies, were in place when Table B-1, "Minimum On-Shift and Augmented Staffing," (Table B-1) was issued. The deviation justification provided by NextEra consist of broad summary statements that describe the proposed changes but do not provide objective evidence that supports the NextEra statement of "no degradation."

Request: Provide a supporting analysis or other objective evidence that justifies the NextEra conclusion that there would be no degradation or loss of function when ERO augmentation response time is increased from 60 minutes to 90 minutes.

RESPONSE

NextEra has determined that resolution of this item is most efficiently accomplished through transitioning it to an audit process.

RAI 41. All NextEra Sites

Section 3.3, "ERO Augmentation Analysis," for Point Beach states:

The ERO augmentation analysis concludes that the difference in times between the proposed common emergency plan 60- and 90-minute response criteria and the NUREG-0654 R2 [revision 2] 60- and 90-minute response criteria does not adversely delay turnover of responsibilities or negatively impact/overburden the ability of the on-shift personnel to perform operational actions or key functions. This alternate staffing approach continues to maintain initial facility accident response in all key functional areas at all times and provides timely augmentation of response capabilities.

Issue: In the LAR, as supplemented, NextEra proposes a 90-minute ERO response time that is not consistent with NUREG-0654 Table B-1, "Minimum On-Shift and Augmented Staffing," (Table B-1). Neither the section titled "ERO Augmentation Analysis" or any other section of the LAR provided an analysis of the tasks that would be performed by the augmenting ERO staff that could support the extension of ERO augmentation time. It was not clear to the NRC staff how extending ERO augmentation response times from 60 to 90 minutes did not adversely delay turnover of responsibilities.

Request: Provide a supporting analysis that supports the NextEra conclusion that extending ERO augmentation response time from 60 to 90 minutes does not delay turnover of responsibilities.

RESPONSE

NextEra has determined that resolution of this item is most efficiently accomplished through transitioning it to an audit process.

RAI 42. All NextEra Sites

Issue: In the LAR, the responsibilities and staffing provided in Figure B.4, "Interrelationship of Emergency Response Organizations," of the NextEra Common Emergency Plan are not consistent with the responsibilities and staffing of the proposed TSC and EOF.

Request: Provide clarification of the apparent differences between TSC and EOF interfaces between Figure B.4, "Interrelationship of Emergency Response Organizations," and the ERO responsibilities described in the proposed NextEra Common Emergency Plan.

RESPONSE

Figure B.4 is being removed from the Common Emergency Plan as it was deemed to be complicated and unnecessary.

RAI 43. Point Beach Only

For Point Beach only, Section 3.6.2, "Removed reference to previously available sound-powered communications system," the disposition section of the LAR for Point Beach states,

Sound powered phone system was unofficially abandoned at the site and replaced with a handheld radio system. Operations staff are required to have access to the radio system.

Issue: It was not clear to the NRC staff that the sound powered phone system is currently functional. Additionally, no information was provided indicating that the radio system provides equivalent communications capability as the sound-powered communications system.

Request: Concerning sound powered phone system:

- a. Provide a clarification of the status of the Point Beach sound powered phone system.
- b. If the sound powered phone system was removed from service for Point Beach, provide a justification for requesting prior approval to a change that has already been implemented.
- c. If the sound powered phone system is still in service at Point Beach, provide a justification that on-site communications will not be adversely affected by the proposed removal of the sound powered phone system.

RESPONSE

The Point Beach sound powered phone system was retired and removed via 10 CFR 50.54(q) process greater than 3 years ago. Adoption of the Common Emergency Plan is not requesting NRC approval of the change. The referenced section is explaining any differences between the SER emergency plan from 1983 and present day.

The station's radio system is a 900mhz trunked radio system that allows for communication with on-shift staff in normal and emergency situations anywhere in the plant. The radio system has a battery backup and an external generator to power the radio system. The radio system meets or exceeds the quality, reliability, performance, and user interface of the retired sound powered phone system.

RAI 44. All NextEra Sites

Issue: In the LAR supplement for Point Beach, Analysis #4 line 204 states three of the fire brigade members are from the 5 auxiliary operators described in step 3.1.4. Because the Point Beach technical specifications require three auxiliary operators when either reactor is operating in MODES 1, 2, 3, or 4, in addition to providing three auxiliary operators to staff the fire brigade,

it does not appear that the Point Beach staffing of five auxiliary operators is appropriate.

Request: Provide a clarification for Point Beach auxiliary operator staffing that demonstrates sufficient auxiliary operators are available to perform plant operation support as required by the Point Beach technical specifications concurrent with meeting the requirements of the Point Beach fire protection plan.

RESPONSE

There are a total of 7 non-licensed operators on shift; 3 of which meet TS 5.2.2.a requirements and the other 4 meet fire brigade requirements. One non-licensed operator that meets TS 5.2.2.a requirements is the fire brigade leader, which allows the shift to meet the 5-person fire brigade complement outlined in site procedures.

RAI 45. All NextEra Sites

Requirement:

- 10 CFR 50.47(b)(5) requires that the means to provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone have been established.
- 10 CFR Part 50, Appendix E.IV.D.1 requires the description shall include identification of the appropriate officials, by title and agency, of the State and local government agencies within the EPZs.

NUREG-0654, Section I.E., Evaluation Criterion E.2 states the alert and notification systems (ANSs) used to alert and notify the general public within the plume exposure pathway EPZ and methods of activation are described. This description includes the administrative and physical means, the time required for notifying and providing prompt instructions to the public within the plume exposure pathway EPZ, and the organizations or titles/positions responsible for activating the system.

Issue: Sections E, "Notification Methods and Procedures," of the site-specific annexes do not provide enough information to meet Evaluation Criteria E.2.

Request: Provide additional information that meets Evaluation Criteria E.2. This should include description of primary and backup methods, and the organizations or titles/positions responsible for activating the system.

RESPONSE

ANS design reports are a part of the emergency plans for all sites except for Point Beach, as they have no responsibility for any maintenance of their program.

A table has been created here to answer the question in a succinct way for evaluation purposes.

Site Name	Primary ANS	Secondary ANS:
Point Beach	IPAWS – WEA and IPAWS – EAS	Route Alerting
Seabrook	Siren System	Reverse 911
St. Lucie	Siren System	Route Alerting
Turkey Point	Siren System	Route Alerting

Add the following to the Common Emergency Plan Section E.2

NextEra Energy ANS used to alert and notify the general public within the plume exposure pathway EPZ is described as follows. Detailed information is maintained in the ANS design report for each site as listed in the site-specific annexes to the Common Emergency Plan.

General Description: The ANS is designed to provide an alerting signal throughout the population on an area wide basis throughout the 10-mile EPZ. The OROs provide an informational or instructional message to the population via various methods as approved by FEMA.

If the primary alerting signal fails, back-up systems are described in the site-specific ANS design report.

Activation of the ANS requires procedures and relationships between both NextEra Energy and the OROs. Prompt alerting and notification of the public within the plume exposure pathway EPZ is the obligation of state and county government or other responsible authority.

ANS is available and operational in the 10-mile EPZ area around each of the operating NextEra Energy nuclear sites. The ANS provides an alerting signal to essentially 100% of the population on an area-wide basis throughout the 10-mile EPZ.

To ensure ANS is maintained in an operational readiness posture, the system is tested on a periodic basis as described in the station's ANS design report.

Add the following to each site annex:

Detailed information on the FEMA approved system used to alert and notify the general public is maintained in site specific Alert and Notification System Design Report.

RAI 46. All NextEra Sites

Requirement:

- 10 CFR 50.47(b)(5) requires in part, ...the content of initial and follow-up messages to response organizations and the public has been established
- Associated guidance in NUREG-0654, Section I.E., Evaluation Criterion E.3 states that

the licensee and state, local, and tribal government organizations establish the contents of the initial and follow-up emergency notifications to be sent from the NNP [nuclear power plant].

Sections E, "Notification Methods and Procedures," of Enclosure 5, "EP-AA-100, NextEra Common Emergency Plan," states in part,

In conjunction with OROs, NextEra sites have established the content of the follow-up messages, which will include additional information regarding event conditions and response actions.

Issue: There is no description of the content of the follow-up messages in the NextEra Common Plan, nor any of the site-specific annexes.

Request: Provide a description of the content of the messages in the NextEra Common Plan, and in the site-specific annexes. Or, provide a justification for not addressing all of the evaluation criteria with respect to content of the follow-up notifications.

RESPONSE

As agreed upon between each NextEra Energy station and the applicable OROs, timing and content of follow-up notifications from the affected station is based upon changing plant conditions. Therefore, the Common Emergency Plan and annexes do not address the follow-up notification as this will impede future coordination efforts between the OROs and the site.

The current process for Florida sites sends the following information approximately hourly.

Plant conditions, Weather data, release significance at the site boundary, and additional release information.

The current process at Seabrook sends information as requested, with some examples of requested information being:

Description of the event, weather data, radioactive information, release information, dose and dose rate data, and contamination survey data.

Point Beach does not have a designated follow up message as state radiological coordinators are bridged in with site dose assessment teams full time.

These processes are stated above for information only and are not to be considered as a commitment to maintain these processes.

RAI 47. Seabrook Only

Requirement:

- 10 CFR 50.47(b)(6) requires that provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.
- 10 CFR Part 50, Appendix E.IV.F.1.a requires the continuous capability for notification to, and activation of, the emergency response network, including a minimum of two independent communication links.

Issue: Section F, "Emergency Communications," of Enclosure 9, "EP-SBK-140, SBK [Seabrook] Emergency Plan Annex," provides a summary of the communication networks.

The Seabrook site-specific annex does not have NRC Communications Channel(s) listed.

Request: Provide a discussion of NRC Communications Channel(s) in the Seabrook annex, consistent with the other site-specific annexes.

RESPONSE

Enclosure 9, "EP-SBK-140 has been updated and now includes the following:

1. NRC Communications Channels

A designated FTS-2001 telephone is installed in the Control Room as the Emergency Notification System (ENS) line. This line is used to provide initial emergency notifications to the Nuclear Regulatory Commission Headquarters Operations Center in Rockville, MD. The line is staffed on an around-the-clock basis by both organizations. The ENS line is also available in the EOF and the Alternative TSC.

Designated FTS-2001 telephones are installed in the Emergency Operations Facility and the Technical Support Center to support the Health Physics Network (HPN). These telephones will be used to provide radiological and protective action-related information to the NRC.

Additional FTS-2001 and commercial line capabilities have been established in each response center for use by NRC response team members.

RAI 48. All NextEra Sites

Requirement:

- 10 CFR 50.47(b)(8) requires adequate emergency facilities and equipment to support the emergency response are provided and maintained.

NUREG-0654, Section II.H, Evaluation Criterion H.1 states that a TSC is established, using current Federal guidance, from which nuclear power plant conditions are evaluated and mitigative actions are developed.

NUREG-0696, "Functional Criteria for Emergency Response Facilities," provides guidance for the TSC.

Issue: Section H.1 of Enclosure 5, "EP-AA-100, NextEra Common Emergency Plan," states,

Site specific details of the primary and backup TSC are described in the site annexes.

The site-specific details in these site-specific annexes do not address some of the functional criteria in NUREG-0696 (i.e., size, structure, habitability, and instrumentation, data system equipment and power supplies).

Request: Provide site-specific details in these site-specific annexes of the functional criteria in NUREG-0696 (i.e., size, structure, habitability, and instrumentation, data system equipment and power supplies) or provide a justification for not addressing all of the functional criteria in these site-specific annexes.

RESPONSE

NextEra Energy existing emergency plans are not wholly committed to NUREG-0696 and the Common Emergency Plan is written to not commit to NUREG-0696. The current TSC, EOF, and alternate facilities were evaluated as part of Analysis Report #4 for each site and noted therein that "no added, removed or altered commitments, or change of intent" non-Reduction In Effectiveness was noted.

Each facility is sized to meet the functional needs of the responders. The communications equipment (which includes plant instrumentation/ data) to connect each facility to each other is appropriate. All on site facilities have habitability controls to ensure radiological breathing protection for all responders and alternate power sources to provide power in the case of normal power being lost.

RAI 49. All NextEra Sites

Requirement:

- 10 CFR 50.47(b)(8) requires adequate emergency facilities and equipment to support the emergency response are provided and maintained.

NUREG-0654, Section II.H, Evaluation Criterion H.3 states that a EOF [Emergency Operations Facility] is established, using current Federal guidance, from which nuclear power plant conditions are evaluated and mitigative actions are developed. NUREG-0696, "Functional Criteria for Emergency Response Facilities," provides guidance for the EOF.

Issue: Section H.3 of Enclosure 5, "EP-AA-100, NextEra Common Emergency Plan," states,

Site specific details of the EOF are described in the site annexes.

The site-specific details in these site-specific annexes do not address some of the functional criteria in NUREG-0696 (e.g., function, size, structure, habitability, instrumentation, data system equipment and power supplies, etc.).

Request: Provide site-specific details in these site-specific annexes to address the functional criteria in NUREG-0696 (e.g., function, size, structure, habitability, instrumentation, data system equipment and power supplies, etc.). Or, provide a justification for not addressing all of the functional criteria in these site-specific annexes.

RESPONSE

Analysis Report #4 for each station compared the current stations' emergency plan to the Common Emergency Plan (CEP) and site-specific Annex. Section H.3 of the CEP and site annexes was evaluated in Analysis Report #4 as "no added, removed or altered commitments, or change of intent", non-Reduction In Effectiveness or editorial.

Therefore, the CEP and site annexes were purposely written to meet regulations and current emergency plan commitments.

NextEra Energy existing emergency plans are not wholly committed to NUREG-0696 and the Common Emergency Plan is written to not commit to NUREG-0696. The current TSC, EOF, and alternate facilities were evaluated as part of Analysis Report # 4 and noted that "no added, removed or altered commitments, or change of intent" non-Reduction In Effectiveness was noted.

Each facility is sized to meet the functional needs of the responders. The communications equipment (which includes plant instrumentation/ data) to connect each facility to each other is appropriate. All on site facilities have habitability controls to ensure radiological breathing protection for all responders and alternate power sources to provide power in the case of normal power being lost.

RAI 50. All NextEra Sites

Requirement:

- 10 CFR 50.47(b)(8) requires adequate emergency facilities and equipment to support the emergency response are provided and maintained.
- 10 CFR Part 50, Appendix E.IV.E.8.d requires an alternative facility (or facilities) that would be accessible even if the site is under threat of or experiencing hostile action, to function as a staging area for augmentation of emergency response staff and collectively having the following characteristics: the capability for communication with the emergency operations facility, control room, and plant security; the capability to perform offsite notifications; and the capability for engineering assessment activities, including damage control team planning and preparation, for use when onsite emergency facilities cannot be safely accessed during hostile action.

NUREG-0654, Section II.H, Evaluation Criterion H.4 states that an alternative facility (or facilities) is established, using currently provided and/or endorsed guidance, which would be accessible even if the NPP site is under threat of or experiencing hostile action.

Issue: Section H.4 of Enclosure 5, "EP-AA-100, NextEra Common Emergency Plan," states,

The alternative facility can communicate with the Control Room, site security, and EOF. The functions of offsite notification and PARs can be performed from the Alternative Facility. Emergency response team planning and preparation can be performed from the Alternative Facility.

The NextEra Common Emergency Plan does not address the capability for engineering assessment activities at an alternate facility (or facilities).

Request: Provide justification for not addressing the regulatory requirements or describe the process for providing engineering assessment activities at an alternative facility (or facilities).

RESPONSE

Engineering support for alternate facilities is performed remotely, the same as it would be performed for the primary facilities. Engineering support will be able to perform all assessment capabilities regardless of the location of the ERF or its condition of primary or alternate. To better explain this in the Common Emergency Plan, the following sentence will be added to Section H.4:

“Remote Engineering ERO is available to perform engineering assessments for both primary and alternate facilities.”

RAI 51. All NextEra Sites

Requirement:

- 10 CFR 50.47(b)(8) requires adequate emergency facilities and equipment to support the emergency response are provided and maintained.

NUREG-0654, Section II.H, Evaluation Criterion H.1 states that a TSC is established, using current Federal guidance, from which nuclear power plant conditions are evaluated and mitigative actions are developed. NUREG-0696, “Functional Criteria for Emergency Response Facilities,” provides guidance for the EOF.

Issue: Section H.1 of Enclosure 5, “EP-AA-100, NextEra Common Emergency Plan,” states,

TSC has the capability to support the remote response of the ERO engineering positions.

This statement is requesting NRC approval for the use of generic remote ERO positions in the TSC.

Request: Provide a clarification on the purpose of this statement and provide a justification for the use of generic remote ERO positions in the TSC.

RESPONSE

The remote ERO positions are listed in Section B of the Common Emergency Plan (CEP). The intent of the sentence is to support the Section B remote Engineering positions. The sentence will be deleted to eliminate confusion. Use of remote ERO positions is being covered via the audit process.

RAI 52. All NextEra Sites

Requirement:

- 10 CFR 50.47(b)(8) requires adequate emergency facilities and equipment to support the emergency response are provided and maintained.

NUREG-0654, Section II.H, Evaluation Criterion H.3 states that a EOF [Emergency Operations Facility] is established, using current Federal guidance, from which nuclear power plant conditions are evaluated and mitigative actions are developed. NUREG-0696, "Functional Criteria for Emergency Response Facilities," provides guidance for the EOF.

Issue: Section H.3 of Enclosure 5, "EP-AA-100, NextEra Common Emergency Plan," states,

The EOF has the capability to support the remote response of ERO positions.

This statement requests NRC approval for the use of generic remote ERO positions in the EOF.

Request: Provide clarification on the purpose of this statement and provide a justification for the use of generic remote ERO positions in the EOF.

RESPONSE

The remote ERO positions are listed in Section B of the Common Emergency Plan (CEP). The intent of the sentence is to support the Section B remote Engineering positions. The sentence will be deleted to eliminate confusion. Use of remote ERO positions is being covered via the audit process.

RAI 53. All NextEra Sites

Requirement:

- 10 CFR 50.47(b)(9) requires adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.

NUREG-0654, Section II.I, Evaluation Criterion I.6 states that each organization, where appropriate, provides methods, equipment, and expertise to make timely assessments of the actual or potential magnitude and locations of any radiological hazards through liquid or gaseous release pathways, including development of post-plume PARs for comparison to

current Federal guidance.

Issue: Section H.3 of Enclosure 5, "EP-AA-100, NextEra Common Emergency Plan," states,

Personnel qualified in dose assessment are available on shift, remotely, and in the EOF.
[emphasis added]

This statement requests NRC approval for the use of generic remote ERO positions.

Request: Provide clarification on the purpose of this statement and provide a justification for the use of generic remote ERO positions.

RESPONSE

NextEra has determined that resolution of this item is most efficiently accomplished through transitioning it to an audit process.

RAI 54. All NextEra Sites

Requirement:

- 10 CFR 50.47(b)(14) requires periodic exercises are (will be) conducted to evaluate major portions of emergency response capabilities, periodic drills are (will be) conducted to develop and maintain key skills, and deficiencies identified as a result of exercises or drills are (will be) corrected.

NUREG-0654, Section II.N, Evaluation Criterion N.4.a states, Emergency medical drills are conducted annually. These drills involve a simulated, contaminated individual and contain provisions for participation by support services agencies (i.e., ambulance and offsite medical treatment facility).

Issue: Section N.4.a of Enclosure 5, "EP-AA-100, NextEra Common Emergency Plan," states,

Each NextEra site will conduct an onsite simulated medical drill once per calendar year. The scope of the emergency medical drill will include a simulated on-site injured and contaminated individual and medical/ first aid treatment, including contamination control.

Emergency Medical Drill offsite participation and periodicity for support Hospital and Ambulance services are performed in accordance with the 42 CFR 482.15 regulations and are not included in the scope of the station medical drills.

The NRC staff requested an evaluation of this change by the Federal Emergency Management Agency (FEMA) in letter dated February 13, 2023 (ML23044A200). In a letter dated March 24, 2023 (ML23086A284) FEMA stated,

This change proposes that Emergency Medical Drill offsite participation and periodicity for support Hospital and Ambulance services are performed in accordance with the 42 CFR 482.15 regulations. Hospitals are accredited by The

Joint Commission in compliance with 42 CFR 482.15, which does not meet the minimum demonstration requirements for the ORO medical services drill. Joint Commission requirements for accreditation rules change frequently based on membership concerns. The Joint Commission currently does not have requirements for CBRN [chemical, biological, radiological and nuclear] related exercise. How will the ORO meet the demonstration standards for the FEMA REP Program assessment if only following Joint Commission standards?

Request:

- a. Provide a justification for the removal of the following NUREG-0654 criteria:

...and contain provisions for participation by support services agencies (i.e., ambulance and offsite medical treatment facility).
- b. Describe how will the ORO meet the demonstration standards for the FEMA REP Program assessment if only following Joint Commission standards?

RESPONSE

NextEra Energy will conduct Emergency Medical Drills in accordance with NUREG-0654 R2, Planning Standard criteria N.4.a.

Emergency medical drills are conducted annually. These drills involve a simulated, contaminated individual and contain provisions for participation by support services agencies (i.e., ambulance and offsite medical treatment facility).

Hospitals and ambulance services will conduct Medical Services Drills in accordance with NUREG-0654 R2, Planning Standard criteria N.4.b.

Medical services drills are conducted annually at each medical facility designated in the emergency plan. These drills involve a simulated, contaminated emergency worker and/or member of the general public and contain provisions for participation by support services agencies (i.e., ambulance and offsite medical treatment facility).

As N.4.b is not a licensee commitment, this activity will not be covered under the NextEra Energy Common Emergency Plan. The provisions for hospitals and ambulance services to participate in the Emergency Medical Drill from N.4.a will be based upon 42 CFR 482.15 regulations and their requirements under N.4.b of NUREG-0654 revision 2. Hospital and other OROs define and manage their own programs for conformance with applicable requirements.